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THE AMERICAN ARCHITECT

FOUNDED 1876

August 1931

Specify
THORP DOORS

The feeling of dignity, strength and integrity required of a public building has been combined with a simple and expressive beauty of form in the main entrance to the Bristol County Registry of Deeds Building, Fall River, Massachusetts. E. M. Corbett of Fall River is the architect.

Hollow bronze frames and doors, with cast bronze grille work, have been used to close in the entrance opening. It will be noted that the doors themselves are of greater than usual height. All interior doors, frames and trim are of hollow steel construction with enamel finish. Complete execution and installation of all doors was handled by Thorp.

THORP FIREPROOF DOOR CO. ***Minneapolis, Minnesota***

KEWANEE STEEL BOILERS

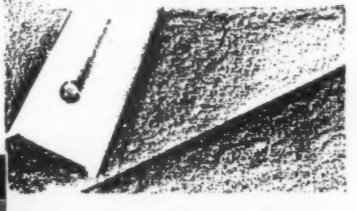
A Kewanee is never "stunted." It is always "full grown" and "well muscled." Correct in size, weight and in proportion.

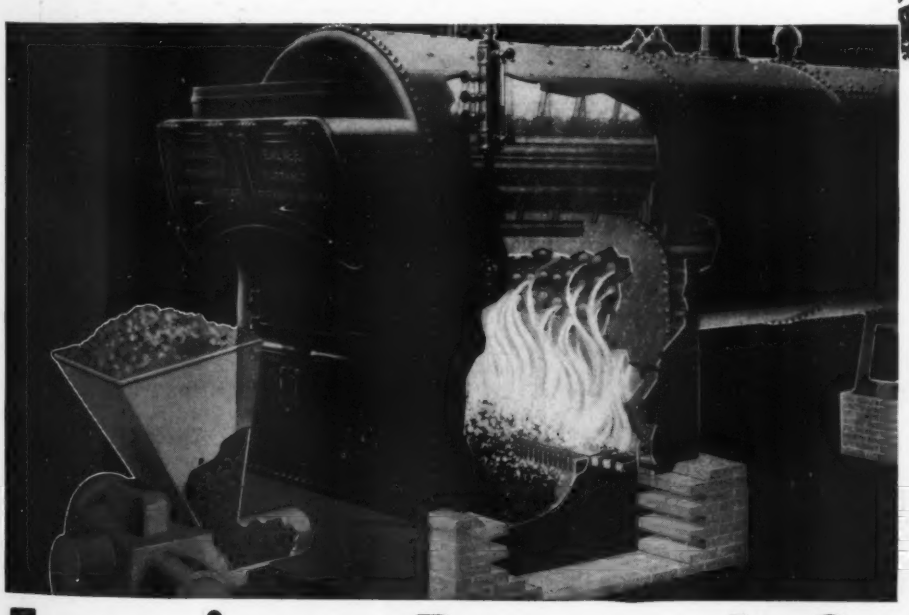
65 years of experience have taught us that to give an owner the long period of satisfactory service which he is entitled to demand in a boiler, we must put certain things into it; certain weight; certain sureness of design; certain skill in workmanship.

Kewanee Boilers have always been built that way. *They always will be.* That's why they steadily maintain their position as the best boiler values obtainable.

Steel plus Rivets equals Strength

Miniature Golf may be all right. At least it's a lot of fun for small money. But a miniature boiler sold to carry a full size heating load invariably leads to grief.





For Big Buildings or Small Buildings—for Coal (hand or stoker fired), Oil or Gas.

Kewanee builds 11 types and 160 sizes to heat from 450 to 47,700 square feet of equivalent direct radiation—with typical Stoker Attachment shown.

KEWANEE BOILER CORPORATION

division of American Radiator & Standard Sanitary Corporation

KEWANEE, ILLINOIS

MEMBER OF STEEL HEATING BOILER INSTITUTE

Branches in Principal Cities

Experience Proves—It Costs Less to OWN a KEWANEE

the small cost will surprise your clients!

INCINERATION
FOR THE MODERN HOME

Most home owners know that incineration is one of the welcome conveniences of a *modern* home. But everyone doesn't know how little it costs!

Compared with other home conveniences the cost of a Kernerator represents a most amazing value. It lasts as long as the building and there is no upkeep cost. It is a *daily* convenience and health protection. All garbage and other household waste is placed in the handy hopper door in the kitchen and falls to the combustion chamber in the basement. The accumulation is air-dried and destroyed by burning—no extra fuel is necessary. Non-combustibles are flame sterilized and removed with the ashes.

When you specify a Kernerator you are selecting a product guaranteed by a financially responsible manufacturer with a nation-wide service organization.

With GAS or OIL for HEATING —*what will you do with* WASTE and RUBBISH?

See our catalog in Sweet's or write for A. I. A. folder.

KERNER INCINERATOR COMPANY
3548 N. Richards Street Milwaukee
Offices in over 150 cities

KERNERATOR
REG. U.S. PAT. OFF.
INCINERATION

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FOR NEW AND EXISTING BUILDINGS

The American Architect, published monthly by International Publications, Inc., 57th Street at 8th Avenue, New York, N. Y.; Yearly subscription, $5.00. Entered as second class matter, April 5th, 1926, at the Post Office at New York, N. Y., under the act of March 3rd, 1879. Issue number 2598, dated August, 1931.

AMERICAN STEEL & WIRE COMPANY

WIRE FABRIC

Where Beauty Demands Permanence

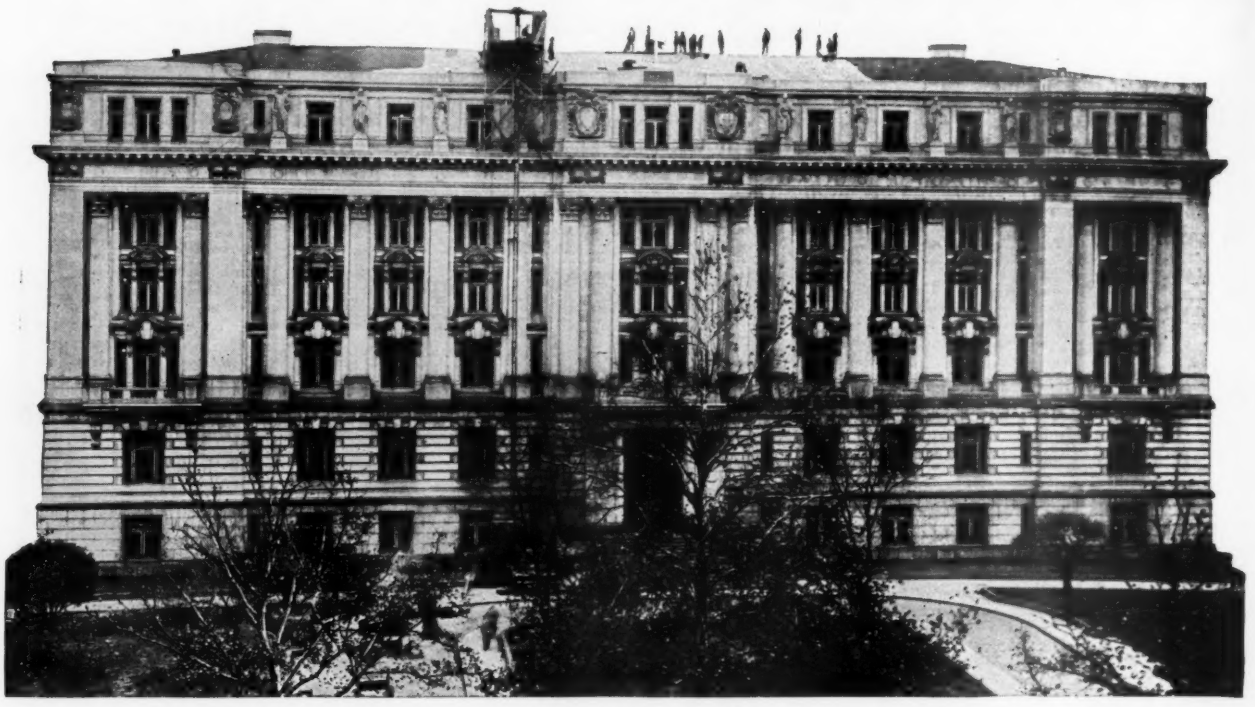
The great buildings of today—monuments of beauty and efficiency—demand permanence of construction to preserve them throughout the ages. The best assurance of this is the short span concrete floor arch reinforced with Wire Fabric. Where such procedure is followed, American Steel & Wire Company Wire Fabric, because of its proved strength and uniformity, is generally specified as standard. Information, including engineering data on Wire Fabric for concrete reinforcement, will be furnished on request.

1831 COMMEMORATING 100 YEARS of PROGRESS IN WIRE MAKING 1931

AMERICAN STEEL & WIRE COMPANY

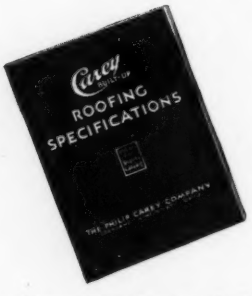
208 South La Salle Street, Chicago SUBSIDIARY OF UNITED STATES STEEL CORPORATION And All Principal Cities

Pacific Coast Distributors: Columbia Steel Company, Russ Building, San Francisco *Export Distributors:* United States Steel Products Company, New York



Reroofing the District Building, Washington, D. C., with a Carey 5-ply Feltex Built-Up Roof, applied according to U. S. Government Specification

Do you specify roofs to meet service conditions?



The Carey Specification Book contains complete specifications for built-up roofs. A copy will be mailed on request.

No one type of built-up roof can be recommended for all conditions. That is why Carey Specifications include all types—Asphalt, Asbestos or Tar and Gravel. The selection of the proper type is governed by the service factors, such as the contemplated life of the building, the roof deck and its slope, and climatic and atmospheric conditions.

Carey control of quality starts with the production of the felts and bitumens, and continues through every step, to the finished roof. The application is handled by approved roofers operating under the supervision of Carey branches and distributors located in every large center, and the finished roof is bonded for 10 or 20 years.

Carey roofing engineers are available for consultation regarding the best type roof for any contemplated structure, and will supply cost estimates, if desired.

THE PHILIP CAREY COMPANY ◆ Lockland, Cincinnati, Ohio

Branches in Principal Cities

BUILT-UP ROOFS
ASPHALT PRODUCTS
ELASTITE EXPANSION JOINT
WATERPROOFINGS
ROOF PAINTS

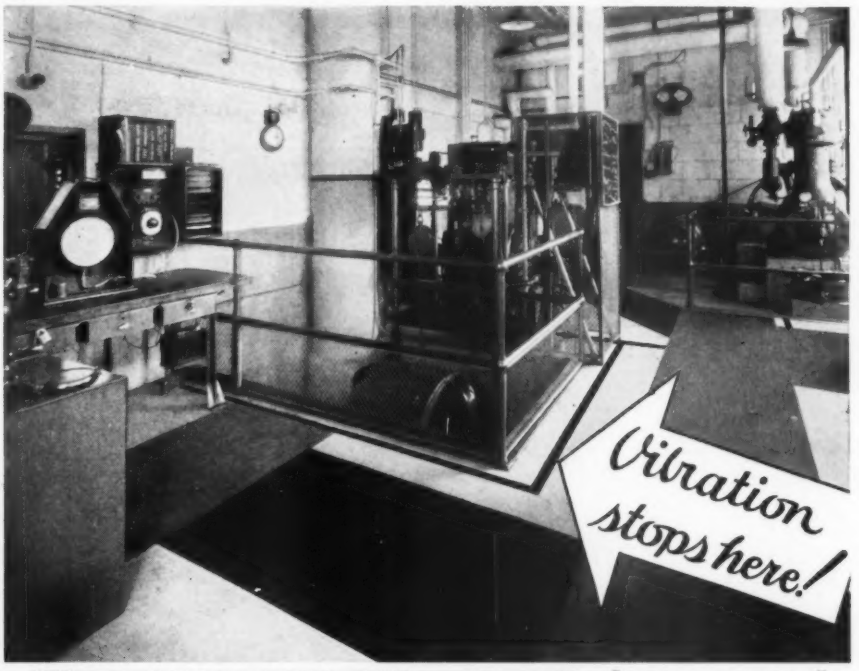
Carey PRODUCTS

HEAT INSULATIONS
ASBESTOS MATERIALS
CAREYSTONE CORRUGATED SIDING
ASFALTSLATE SHINGLES
BUILDING PAPERS

552

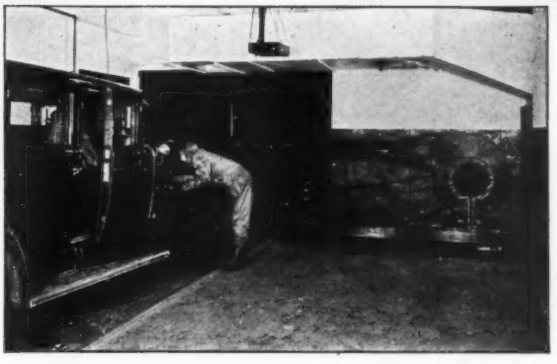
CHRYSLER protects its test rooms with CORK

Carter Carburetor, too, and other leading automotive companies guard low-temperatures with
ARMSTRONG'S CORKBOARD



CORK BARS VIBRATION *as well as heat from the Chrysler test rooms. This picture shows how Armstrong's Vibracork isolates moving machinery.*

FORTY BELOW ZERO *tests Carter Carburetor operation here, thanks to Armstrong's Corkboard on the walls and Cork Covering on the cold lines.*



ARCTIC CLOTHING PROTECTS *the workers in this sub-zero testing room of a leading motor company. Armstrong's Corkboard guards the temperatures.*

HOW will the motor perform at 20° below zero? Will the carburetor function properly at sub-zero temperatures? What effect will severe cold have on other equipment?

To answer these questions, leading automotive manufacturers are building cold test rooms. The Chrysler Corporation, for instance, has three such rooms. They are thoroughly insulated with 8 and 10 inches of Armstrong's Corkboard, for temperatures from 20° to 70° below zero. Isolation from vibration has been secured with a cushioning layer of Armstrong's Vibracork. Vibracork is recommended for absorption of vibration and reduction of noise in moving machinery.

Uses like these prove cork's adaptability and safety for any insulation need. Under severe laboratory conditions, or in actual working installations, cork stands up. Its low coefficient of thermal conductivity combines with low moisture absorption to make Armstrong's Corkboard the ideal *permanent* insulation.

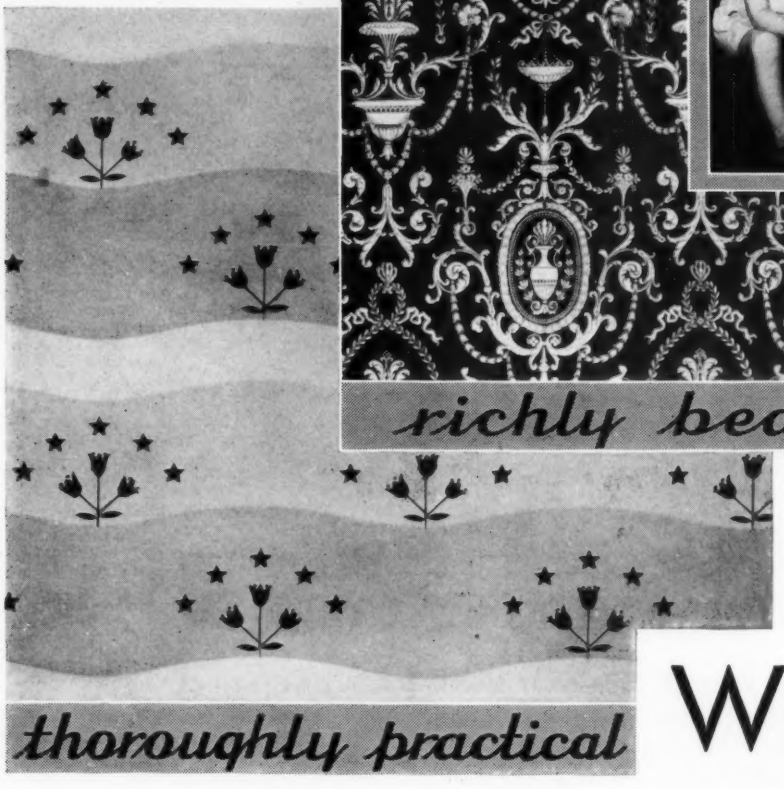
Armstrong's (A) Product

Almost every day sees the development of some new use for cork and cork products. Armstrong's Research Laboratory, where scientists engage in daily experiments with insulation materials and methods, contributes much to this progress. Armstrong engineers will gladly tell you about Armstrong service and Armstrong products. Descriptive booklets and samples are yours for the asking. Address Armstrong Cork & Insulation Company, 936 Concord St., Lancaster, Pennsylvania.

Armstrong Cork & Insulation Company

CORKBOARD . . CORK COVERING . . VIBRACORK . . CORKOUSTIC . . INSULATING BRICK

CANVASSED WALLS



WALL-TEX

THE people you serve — those who appreciate architectural beauty — are quick to recognize the unusual charm and excellence of quality in Wall-Tex Canvassed Walls.

We invite you to send for samples of these fine *fabric* wall coverings. Show them to home builders and see for yourself how the richness of *fabric texture*, distinctive patterns and well-chosen colorings instantly win the enthusiasm of those who want fine things in the home and are willing to pay a moderate price.

Leading Architects everywhere recommend Wall-Tex for homes, apartments, hotels, schools, hospitals, institutional buildings of all kinds. They recommend and specify it for these many uses because Wall-Tex is completely practical — easily washed and kept beautiful; made with a tough fabric base that resists scuffing, reinforces the wall and protects against plaster cracks.

Every architect should know Wall-Tex. Send us your name and address on the margin of this page — for architect's sample book and interesting folder, "The Modern Trend in Wall Coverings."

See Sweet's Page C-4178

COLUMBUS COATED FABRICS CORPORATION .. Dept. B-8 .. COLUMBUS, OHIO

First the eye, then the balance sheet approves store fronts of Alcoa Aluminum

Dignified smartness and commanding individuality of modern display attracts shoppers. The promise of up-to-date merchandise is carried by store fronts of Alcoa Aluminum. An infinite variety of effects is obtainable by employing Alcoa Aluminum rolled shapes or extruded moulding.

Only 1/3 the weight of other metals commonly used, Alcoa Aluminum may be cast, forged or rolled into individual store front sections at a moderate cost. Alcoa Aluminum store fronts are readily maintained and give long service.

It's good architecture and good merchandising to use Alcoa Aluminum for store fronts. You'll be interested in the facts and figures. Let us show you. ALUMINUM COMPANY *of* AMERICA; 2440 Oliver Building, PITTSBURGH, PENNSYLVANIA.

STORE FRONTS made of

ALCOA ALUMINUM

Photo by R. I. Nesmith & Associates

Glass with *Beauty* IN it *as well as* BEYOND it

WHAT you see when you look *at* a sheet of window glass decides what you will see when you look *through* it.

Pennvernon Window Glass possesses a striking beauty. Instead of the old time waves and unsightly defects, you find a new flatness and a new brilliance that seems almost incredible. And Pennvernon has no "wrong" side—both of its surfaces retain their original lustrous finish.

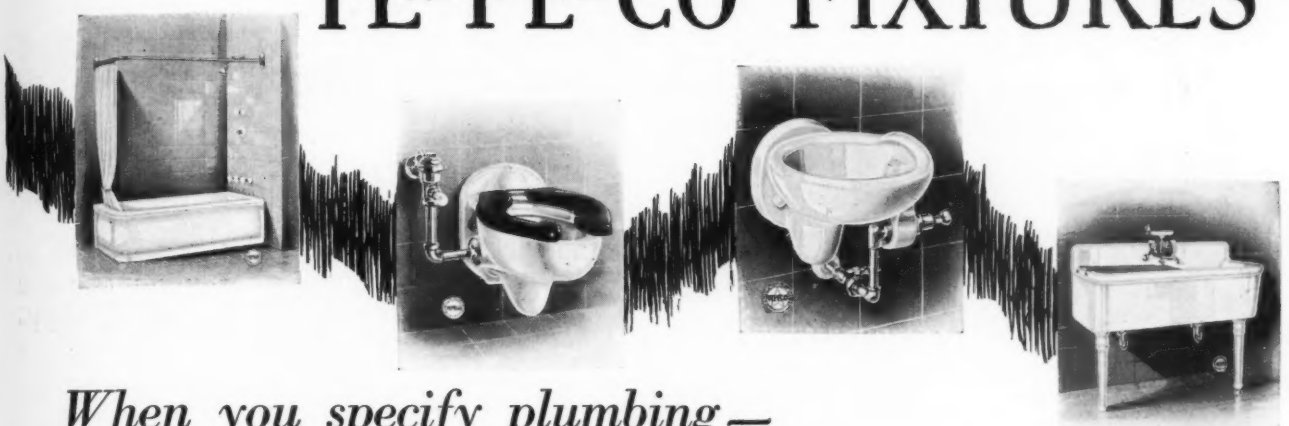
Consequently, Pennvernon Window Glass offers remarkable transparency and clearness of vision. Bright and clear as a slice of winter sunshine, it shows the beauties beyond your window as they really are.

It is flatter, brighter, clearer—but Pennvernon costs no more than ordinary glass.

We will be glad to send large or small samples for your inspection, so that you may be convinced of Pennvernon's superiority. At all the warehouses of the Pittsburgh Plate Glass Company—one in every principal city—Pennvernon is available, as well as at leading glass jobbers. Write for our Pennvernon Booklet. Address Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Pa.

PENNVERNON
flat drawn
WINDOW GLASS

A complete selection of TE-PE-CO FIXTURES



When you specify plumbing—

IT is a convenience, an economy and a satisfaction to select all your bathroom fixtures from one make. And to know that you will get the same high quality of workmanship and material in every fixture.

Such is the reputation enjoyed by TE-PE-CO Fixtures.

Our unusually complete facilities enable us to offer you the widest possible choice of sanitary fixtures for hotels, apartments, schools, hospitals and residences of every size and description.

To check up on all equipment being installed, it is well to look for the TE-PE-CO Trade Mark—which is the symbol for the TE-PE-CO Guarantee.

Every Te-pe-co Fixture

OUR GUARANTEE

We make but one grade of ware—the best that can be produced—and sell it at reasonable prices. We sell no seconds or culls.

Our ware is guaranteed to be equal in quality and durability to any sanitary ware made in the world.

The Te-pe-co trade mark is found on all goods manufactured by us and is your guarantee that you have received that for which you have paid.

—has this trade mark on it

THE TRENTON POTTERIES COMPANY
TEPECO
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TRADE MARK REG.

THE TRENTON POTTERIES COMPANY

TRENTON, NEW JERSEY, U. S. A.

National Showrooms—New York City, 101 Park Ave., Entrance on 41st Street
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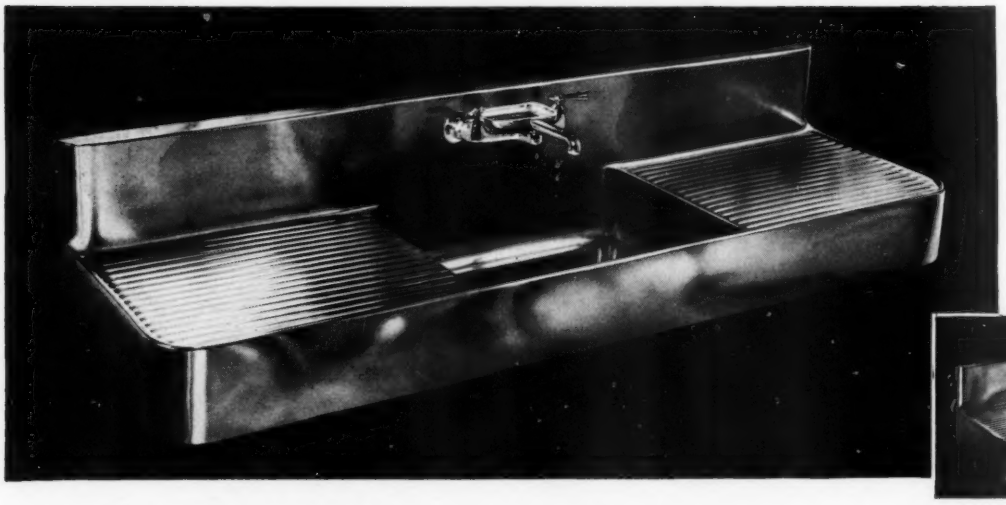
Branch Offices—Boston and Chicago
Export Office—115 Broad Street, New York City

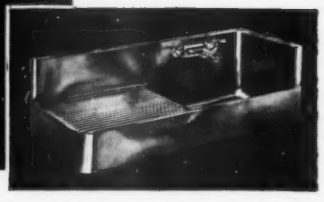
TE-PE-CO ALL CLAY PLUMBING FIXTURES

AT LAST...

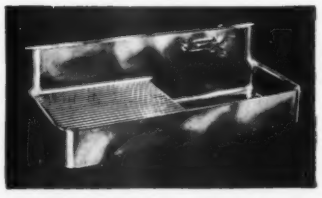
a standardized kitchen sink that blends with every color scheme...



Double drain board Monel Metal kitchen sink. Made in nominal sizes of 72" x 21" and 60" x 21".



Monel Metal corner kitchen sink. Splasher at bowl end, drain board either right- or left-hand. Supplied in nominal sizes of 51" x 21" and 42" x 21".



Single drain board Monel Metal kitchen sink. Available in both left- and right-hand drain board models. Made in nominal sizes of 50" x 21" and 41" x 21".

● **Why plan a kitchen, perfect in every detail of design, appointment and decoration, only to have the ensemble marred by a sink which does not fit the surroundings?**

The new Monel Metal kitchen sinks are the only standardized sinks that give home owners full freedom of expression in kitchen color planning. The neutral, silvery tones of these modern sinks not only harmonize perfectly with colors of walls, curtains and furniture, but actually draw these colors together and heighten their beauty and effectiveness. And when your clients tire of one decorative scheme, they can switch to any other without the slightest concern about the adaptability of the Monel Metal sink.

Thanks to standardized construction and quantity production, you can now bring your clients the color harmony, beauty, durability and convenience of Monel Metal sinks at prices the average pocketbook can readily afford.

Specifications and Advantages of the new standardized Monel Metal kitchen sinks...

1. Rich, lustrous beauty with a satiny, glass-smooth surface.
2. Rust-proof... highly resistant to corrosion... easy to clean and keep clean.
3. Solid metal clear through, with no coating to chip, crack or wear off. Steel-like strength gives lifetime durability.
4. Neutral, silver tone blends with any kitchen color scheme. Gives new freedom to kitchen decoration.
5. 10 standardized models and 6 standardized sizes. A model and size for any type of kitchen.
6. 31% more working space than an ordinary sink of same nominal size.
7. One-piece construction of heavy gauge Monel Metal. No joints or seams. Reinforced and sound-deadened.
8. Standardized construction and quantity production methods bring prices within reach of the average purse.

Monel Metal is a registered trade mark applied to a technically controlled nickel-copper alloy of high nickel content. Monel Metal is mined, smelted, refined, rolled and marketed solely by International Nickel.

INCO MONEL METAL

A HIGH NICKEL ALLOY

MONEL METAL

NICKEL ALLOYS LOOK BETTER LONGER

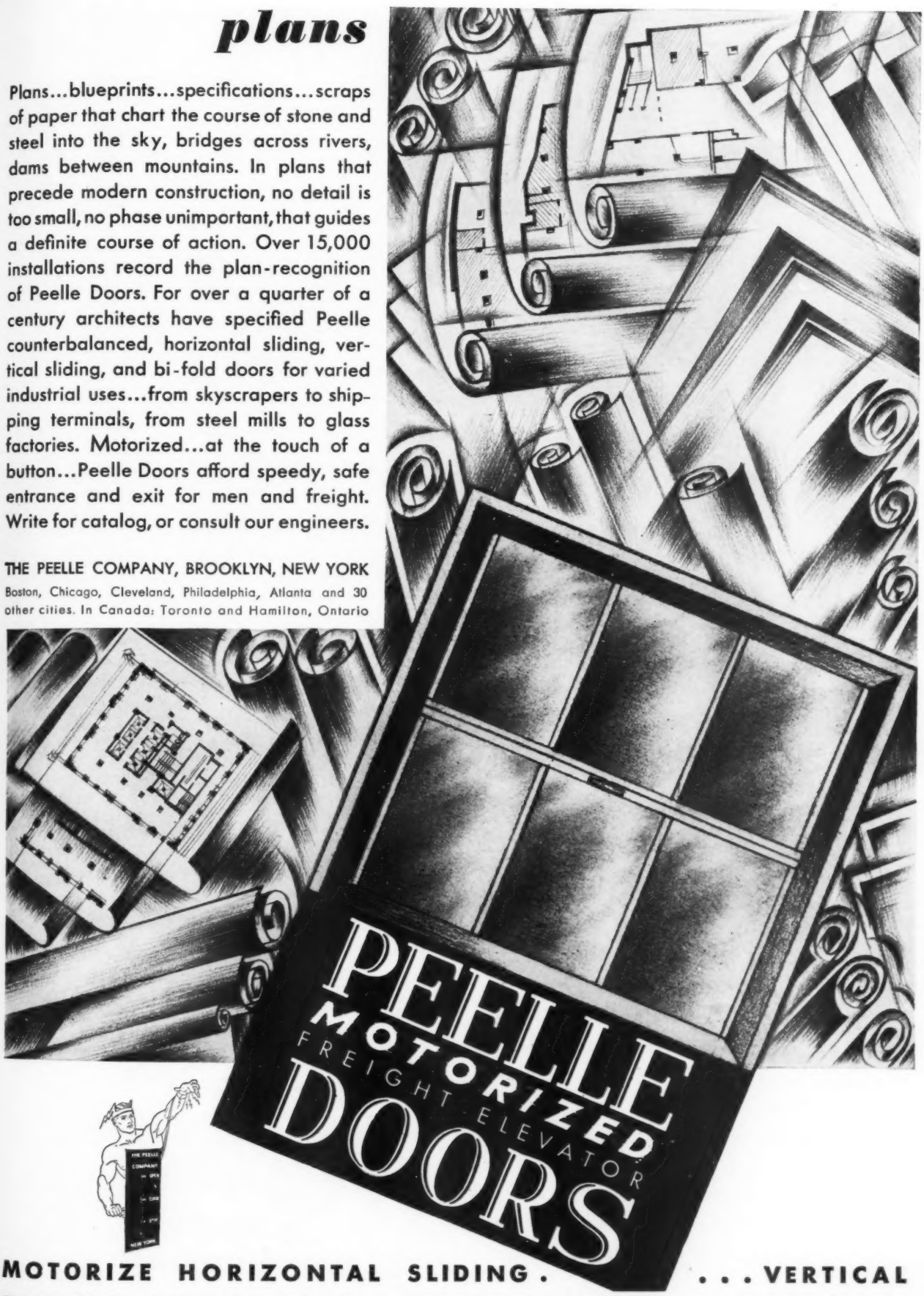
THE INTERNATIONAL NICKEL COMPANY, INC., 67 WALL STREET, NEW YORK, N. Y.

plans

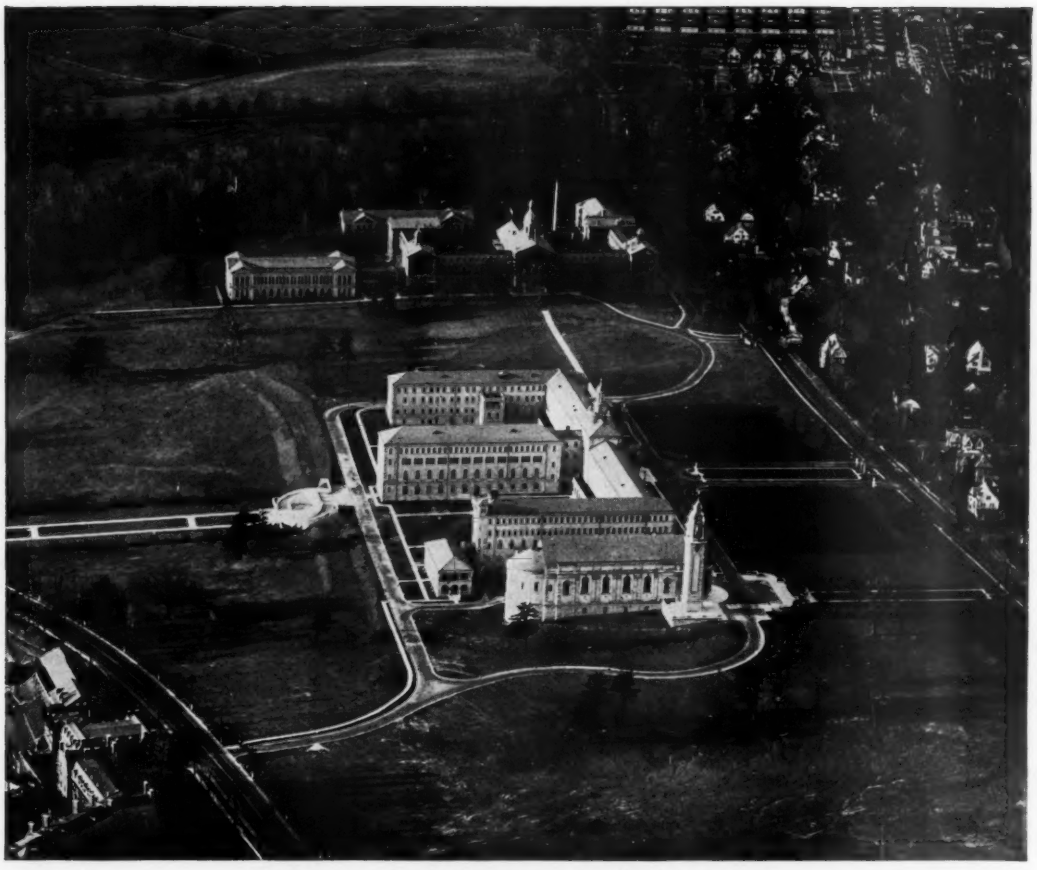
Plans...blueprints...specifications...scraps of paper that chart the course of stone and steel into the sky, bridges across rivers, dams between mountains. In plans that precede modern construction, no detail is too small, no phase unimportant, that guides a definite course of action. Over 15,000 installations record the plan-recognition of Peelle Doors. For over a quarter of a century architects have specified Peelle counterbalanced, horizontal sliding, vertical sliding, and bi-fold doors for varied industrial uses...from skyscrapers to shipping terminals, from steel mills to glass factories. Motorized...at the touch of a button...Peelle Doors afford speedy, safe entrance and exit for men and freight. Write for catalog, or consult our engineers.

THE PEELLE COMPANY, BROOKLYN, NEW YORK

Boston, Chicago, Cleveland, Philadelphia, Atlanta and 30 other cities. In Canada: Toronto and Hamilton, Ontario



MOTORIZE HORIZONTAL SLIDING. . . . VERTICAL SLIDING AND BI-FOLD DOORS WITH PEELLE OPERATORS



The Seminary of St. Charles Borromeo, Overbrook, Pennsylvania

New Group in foreground:
Paul Monaghan, *Architect*
Chambersburg Construction Co., *Heating Contractors*

Alterations to old group in background:
Hoffman - Henon Company, *Architects*
S. Faith & Company, *Heating Contractors*

The Seminary of St. Charles Borromeo

is one of many notable University Groups heated by Webster Systems

Others include Princeton University, Massachusetts Institute of Technology, University of Notre Dame, University of Alabama, William and Mary College, Vassar College, etc.

When the old group (shown in the background) was modernized three years ago the heating system was equipped with Webster MODERATOR Control—in which steam to the entire old group of buildings is actually Controlled-by-the-Weather through a unique Roof Thermostat. Results in terms of fuel economy, enhanced comfort, ease of operation and low maintenance cost deserve the most careful study by university administrators and their architects and warrant the prediction that true Control-by-the-Weather will play an important part in university group heating during the next decade.

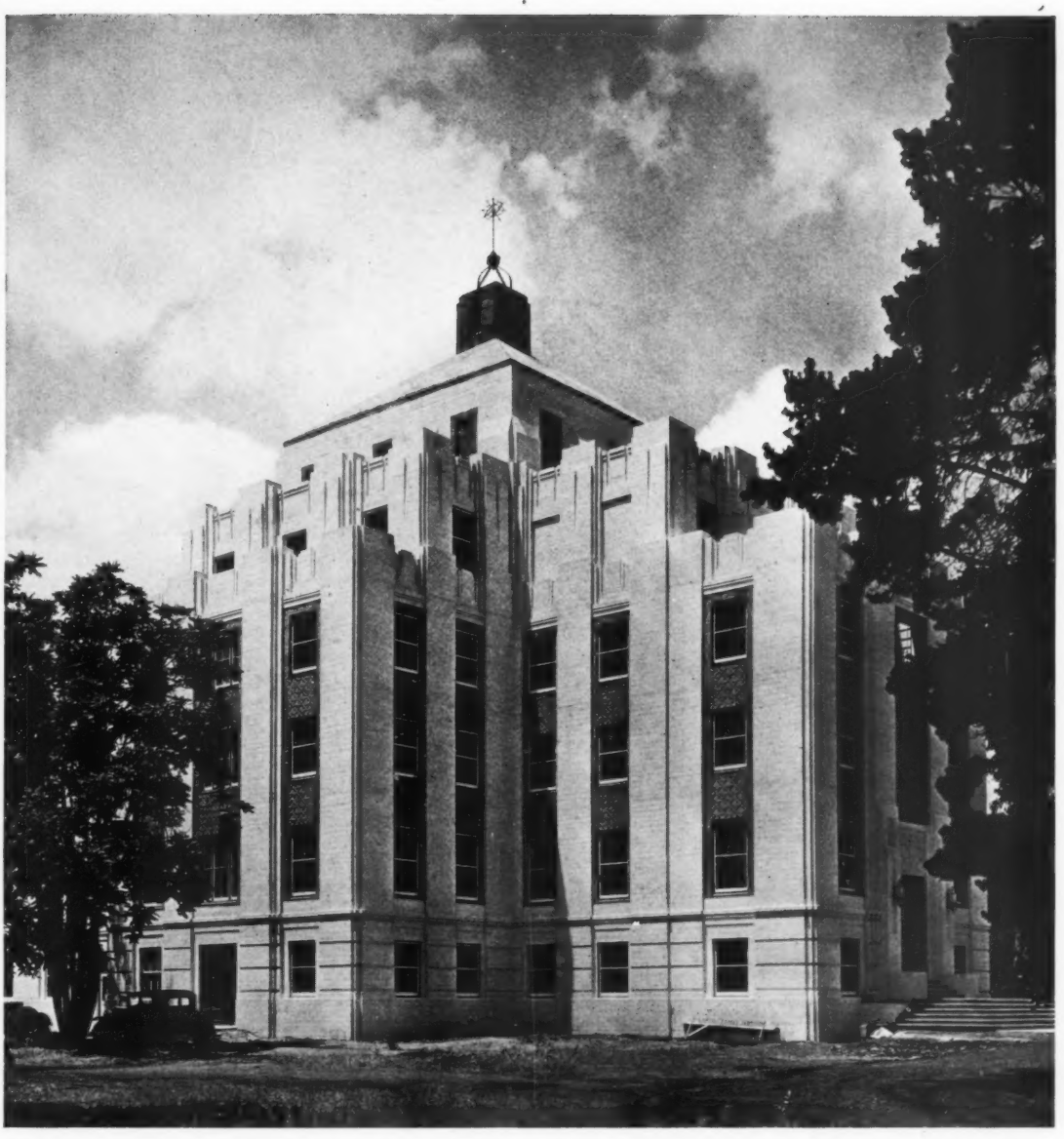
a I 62

-since 1888

Webster

Systems of Steam Heating

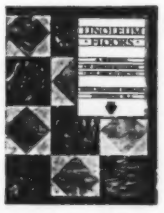
For complete details and able cooperation write: Warren Webster & Company, Camden, N. J.



5,000 square yards of W. & J. Sloane Linoleum have been installed in the Palo Alto Hospital, Palo Alto, Calif.

The fact that W. & J. Sloane Linoleum is double-waxed means that it can be kept immaculate at all times with very little effort. Which is one reason why so many architects specify it for hospital use.

THIS DATA BOOK WILL PROVE MOST HELPFUL WHEN SPECIFYING LINOLEUM FLOORS



WE SHALL GLADLY SEND YOU A COPY ON REQUEST
W. & J. SLOANE, 577 FIFTH AVE., N. Y.

W. & J. SLOANE LINOLEUM

There's Profit in Beauty

An Outstanding Desco Installation

Eastern Outfitting Co. Bldg., Los Angeles, Calif. Claude Beelman, Architect; J. V. McNeil Co., General Contractors; Wigren-Lawrence Glass Co., Glass and Store Front Contractors.

Desco METAL REG. U. S. PAT. OFFICE

STORE FRONTS

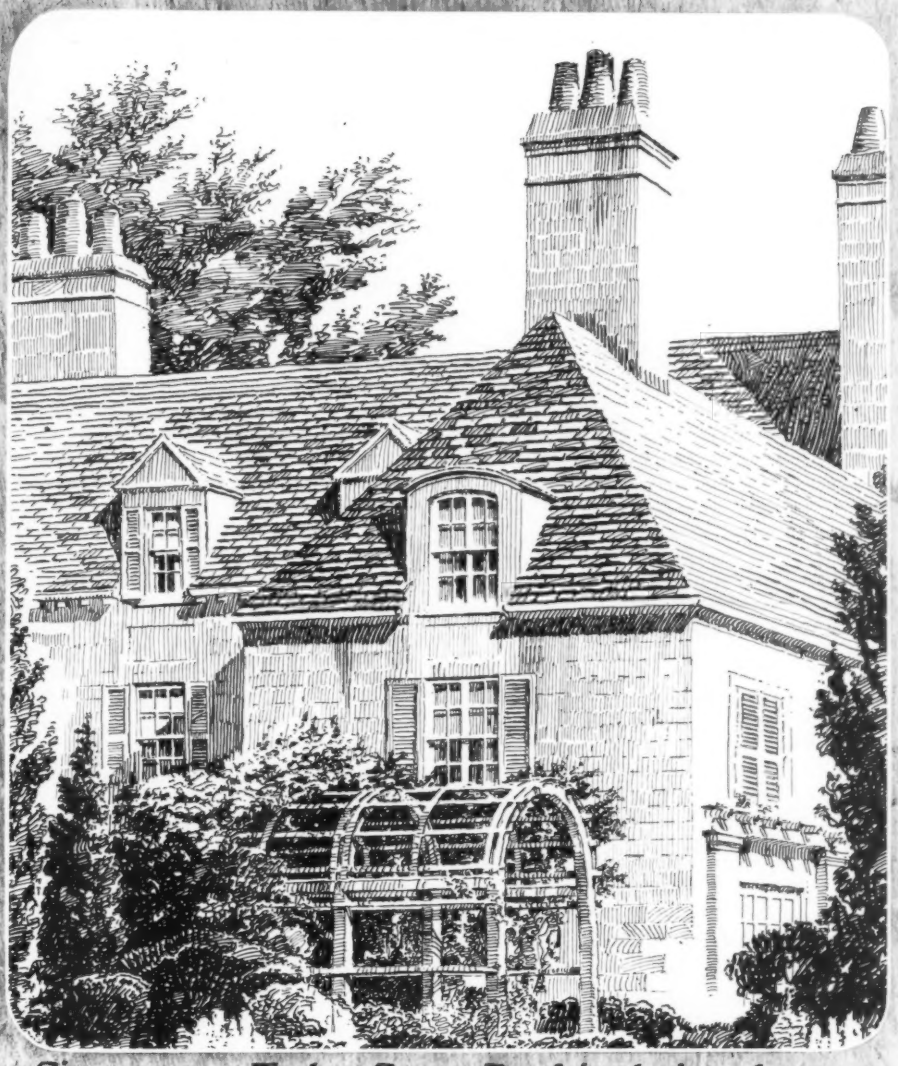
Often architects specify Desco Store Fronts for ground floor shops because their clients find it much easier to rent a store equipped with attractive display windows. Handsome, modern Desco Store Fronts are manufactured in a wide variety of metals, including solid copper (plain or embossed), solid bronze in all standard finishes and aluminum alloy (white metal). Thus they harmonize with any architectural style. Then, too, they have the additional quality of flexibility which protects the glass against abnormal wind pressure. Adorn the building and please the owner with Desco Store Fronts.

For full architectural details see Sweet's catalog. Write us for complete working data and price list. Remember, too, wherever you are there is a distributor near you. We also carry a complete line of "Desco" construction material in our New York City Warehouse.

DETROIT SHOW CASE CO., 1670 West Fort Street, Detroit, Michigan

New York City Office and Warehouse—344-346 East 32nd Street Pacific Coast Office—450 Skinner Building, Seattle, Washington

TUDOR



Since every Tudor Stone Roof is designed especially for the building it is to cover, perfect harmony is not a matter of chance, but of certainty.

The staff of our Architects' Service Department will be glad to cooperate in planning a Tudor Stone Roof.

Rising and Nelson Slate Company

WEST PAWLET, VERMONT

Architects' Service Department: 101 Park Avenue, New York City

CHICAGO DETROIT PHILADELPHIA BOSTON

STONE TILE ON THE ROOF

The NORMAN SCREENED CASEMENT

W. M. Martin Residence, Grosse Pointe Park, Michigan, J. J. Berger, Inc., Architect.

A NEW RESIDENTIAL WINDOW

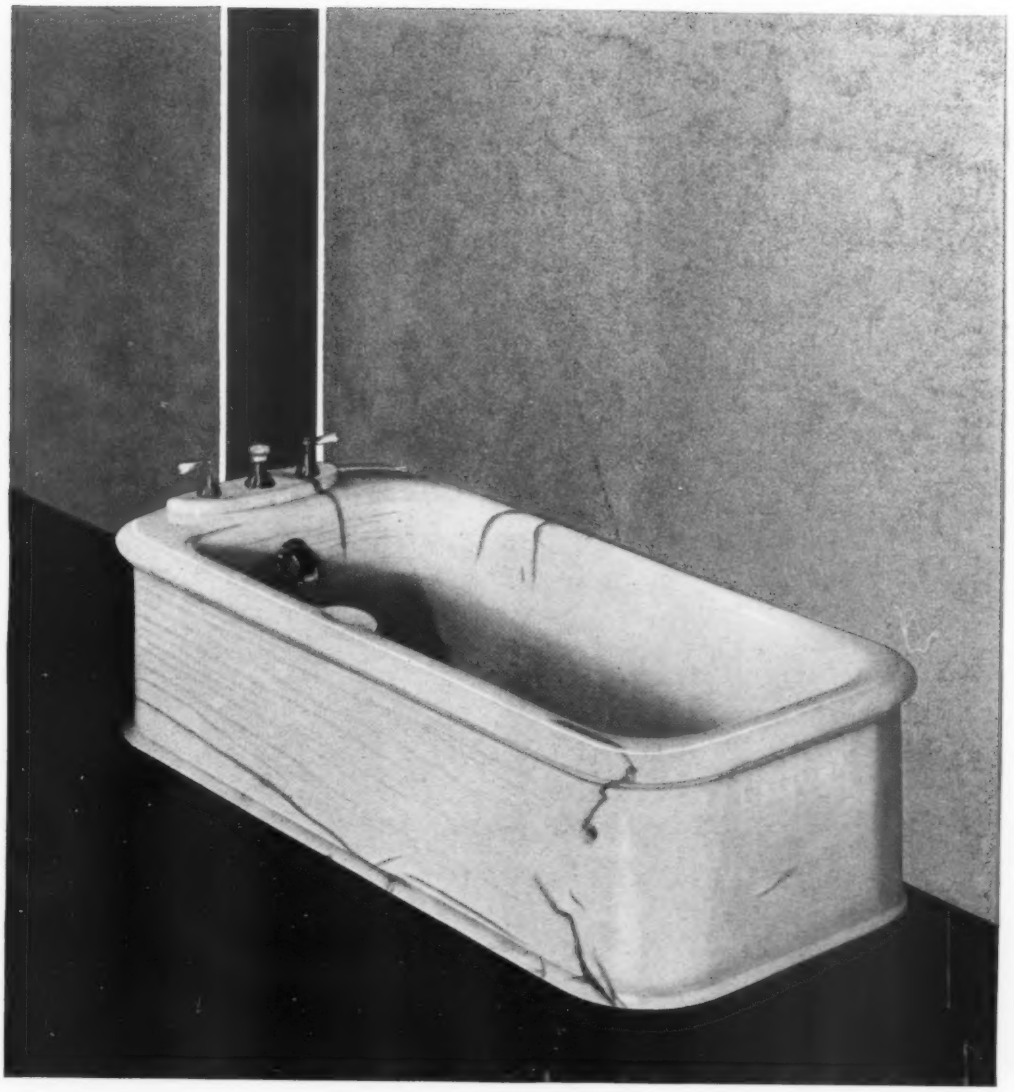
FOR high-class residential jobs, Crittall now offers the Norman Screened Casement. This new unit represents a quality window combined with an advanced type of screening arrangement. ¶ The new Crittall Norman Screen lies perfectly flat against the window. Opening and closing the casement is made simple and easy by a convenient sill operator—at no point is the screen panel itself cut. The entire screen frame can be easily attached or removed. ¶ The new Norman Screened Casement is equally suitable for club and office buildings—and has already been selected by architects for such commissions. We will gladly send you a copy of our folder giving complete installation details. Or telephone our nearest representative and he will gladly call and show you a sample.

CRITTALL CASEMENT WINDOW COMPANY, 10922 Hern Ave., Detroit, Mich.

CRITTALL CASEMENTS

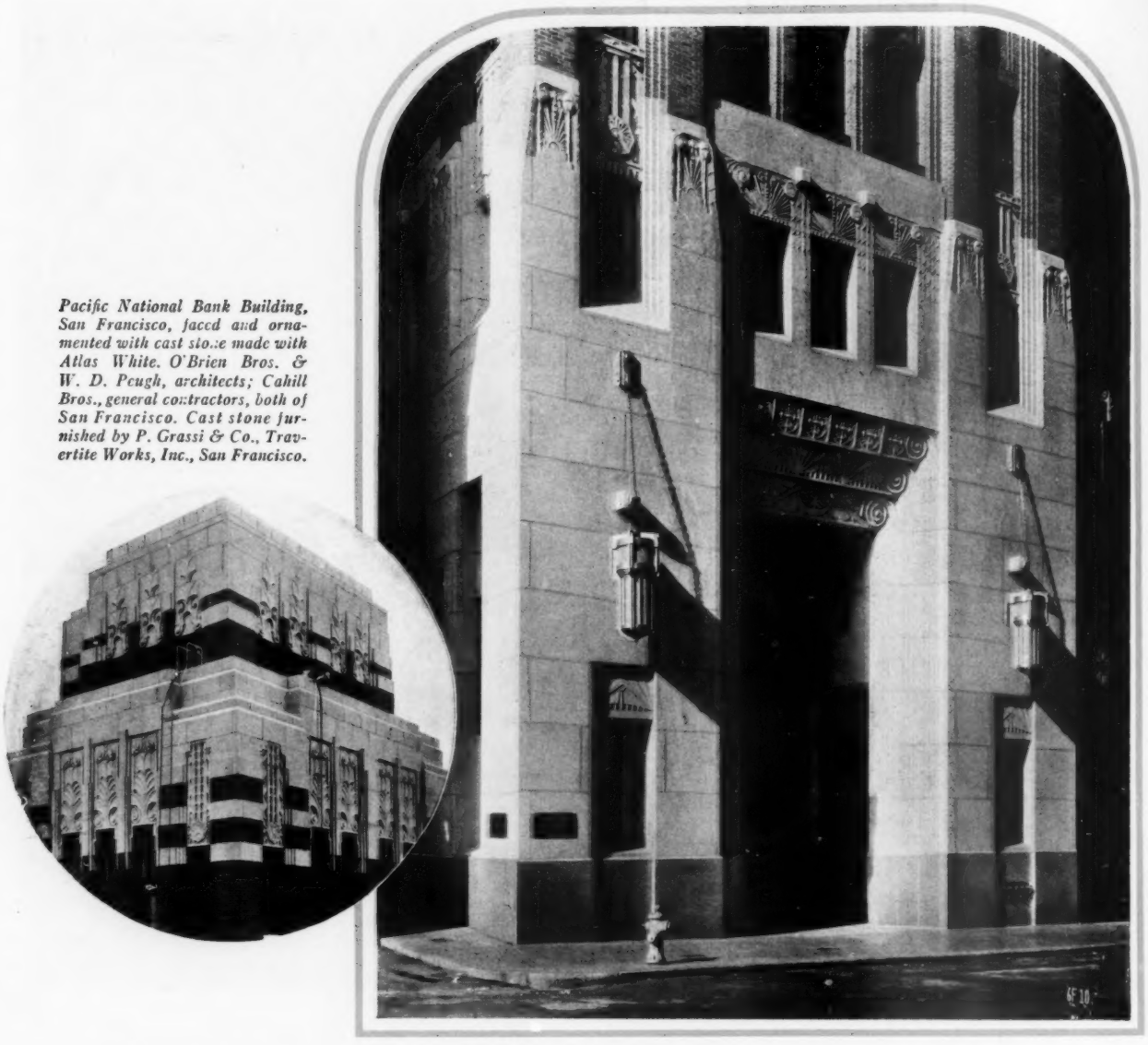
STANWIN ▾ NORMAN ▾ UNIVERSAL

The Norman Screened Casement is operated entirely from the inside



Bath of Pedrara Onyx with Design 50 Onyx Trimmings

CRANE



Pacific National Bank Building, San Francisco, faced and ornamented with cast stone made with Atlas White. O'Brien Bros. & W. D. Peugh, architects; Cahill Bros., general contractors, both of San Francisco. Cast stone furnished by P. Grassi & Co., Travertite Works, Inc., San Francisco.

Cast stone is adaptable to *your* ideas

CAST stone permits the designer to adapt building stone to his ideas—it does not compel him to fit his ideas to the stone available. It offers the owner a wide choice of distinctive, colorful, durable facings for the exteriors of new or remodeled buildings.

Cast stone in almost any desired shape, texture and color is available. Manufacturers will furnish on request samples of fine cast stone made with either non-staining Atlas White or Atlas *Waterproofed* White portland cement.

CONCRETE FOR PERMANENCE

Universal Atlas Cement Co.

Subsidiary of United States Steel Corporation

CHICAGO · NEW YORK · PITTSBURGH · MINNEAPOLIS · KANSAS CITY

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Volume CXXXX
Number 2598

The AMERICAN ARCHITECT

AUGUST
1931

(Trade-mark registered, U. S. Patent Office)
FOUNDED 1876

This Month's Cover

TOWERS OF SEMUR

SEMUR is situated in the heart of old Burgundy, one of the fairest and richest of the provinces of France, famous for its vintages. This old fortified feudal town was built on a rocky promontory surrounded on three sides by a deep, quiet stream forming a natural moat. Of its ramparts, six heavy circular towers with pointed roofs remain, two pairs guarding the upper and lower gates. The ancient walls have been absorbed by tall houses with steep pitched slate roofs.

A. C. Webb, the artist, is a former architect, at one time having been connected with the office of the late Donn Barber. After his discharge from the A. E. F., he established himself in Paris as etcher and architect. He recently returned to this country and made a number of striking drawings of New York which were exhibited at the Architectural League of New York, at Kennedy's, and at other exhibitions in Chicago and New Orleans.

At present, Mr. Webb is driving around the United States, making drawings and water colors wherever and whenever the spirit moves him.

BENJAMIN FRANKLIN BETTS, A.I.A., *Editor*
ERNEST EBERHARD, *Managing Editor* WALTER E. DEXTER, *Advertising Manager*
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LOG HOUSES—How to keep the bark from coming off
LIGHTING—Use and design of modern illumination

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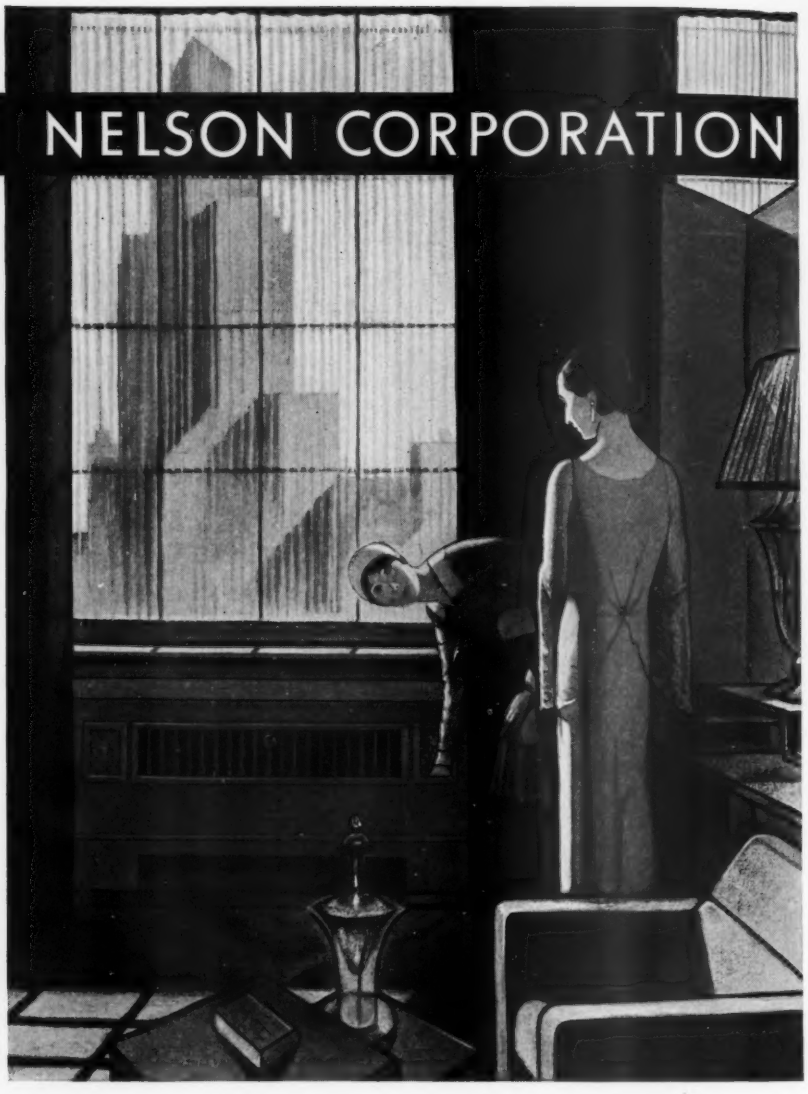

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"Almost every business has its hidden enemies . . . Some of these enemies are belated adherence to tradition, slavish acceptance of trade custom . . . failure to seek and find new markets and dull self-satisfaction with all-rightness of the product."

NORVAL A. HAWKINS in "The Nation's Business"

Why Wait Any Longer?

By BENJAMIN F. BETTS, A.I.A.

WHEN will business pick up? How soon will prosperity return? What can be done to improve conditions? Questions that are in the minds of all men, everywhere. Questions that have been asked by architects many times during the past two years without a satisfactory answer.

STATISTICIANS, economists, and optimists have answered by saying that prosperity is just around the corner—another six weeks, another three months and the tide will turn. But it has not, nor will it, so long as everyone sits back and waits for business to recover. Many already know this. Many, tired of waiting, have gone ahead, or set about solving their own problems. These men are tomorrow's leaders. Watchful waiting can accomplish nothing. Individual effort correctly applied can accomplish much. Times and conditions have changed. A new point of view is needed now as never before.

The business of building is a basic industry. Construction work has not ceased. And as long as there is building there is a market for architectural services.

BUT—no buildings that are not needed will be built for a long time to come. In the next few years more attention than ever before will be given the questions: Is there an economic demand for this type of building? Is this building a sound investment? As never before, architects will be called upon to design the least building for the least money for the maximum return. Where a building shortage exists it will be filled.

The problem faced by the architectural profession today is fourfold.

1. Abandon absurd adherence to tradition and slavish acceptance of "trade custom."
2. New outlets for architectural service must be found and lost markets recovered.
3. The demand for architectural service must be increased by selling the profession to the public.
4. Service rendered by the profession must be improved and extended.

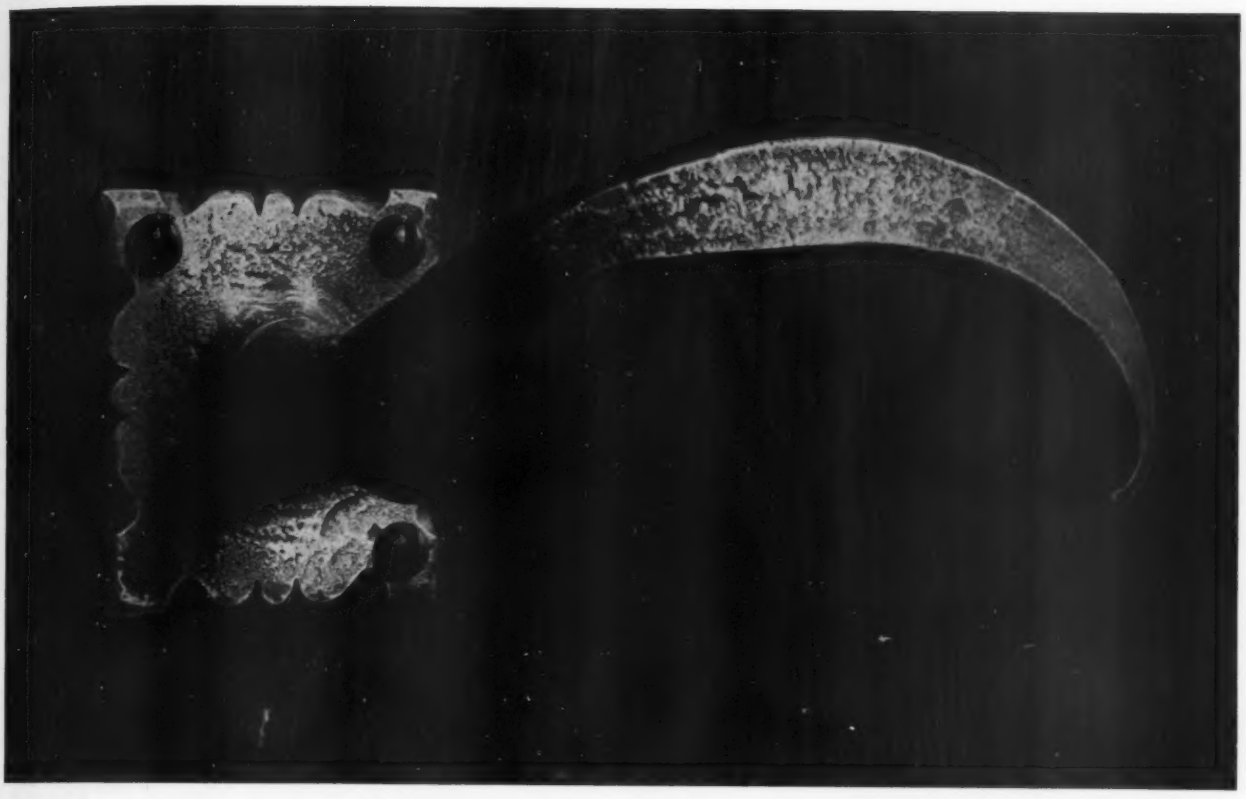
This hardware was made by an ARCHITECT

FACED with the desire for unusual wrought iron hardware and with no local forge apparently able to turn out the job as the architects wanted it done, Anthony Lord decided to do the work himself. He writes:

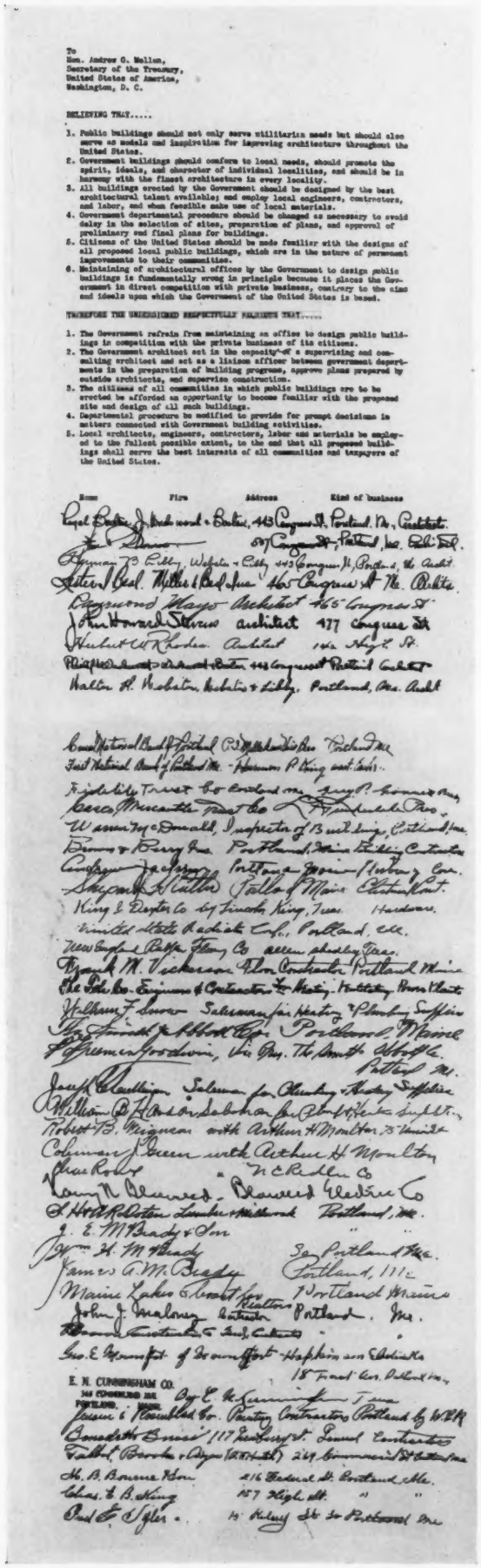
"For this building we wanted hand made iron hardware with some individuality but the disposition of at least one local shop was to cut the hinges from steel plate with a torch. This cheery idea didn't encourage us to give them the job and we looked elsewhere without much better result.

"I am a confirmed tinker and have a friend with the same bias, so we concluded to have a go at the iron ourselves. Thus an unoccupied garage became the smithy, the office brick samples became a forge, and, finding here and there the rest of the tools of the trade, we went to work. We were ignorant and found the going heavy but the first few weeks were the hardest, and when we finished hinges and handles we were much wiser but not much richer. But we had had a lot of fun.

"Cheered by the results gotten on the first job we have since undertaken work for other offices with, we think, some success."



Designed
and wrought by
Anthony Lord, A.I.A.
of Lord and Lord
Asheville, N. C.



To
Hon. Andrew G. Mellon,
Secretary of the Treasury,
United States of America,
Washington, D. C.

BELIEVING THAT.....

1. Public buildings should not only serve utilitarian needs but should also serve as models and inspiration for improving architecture throughout the United States.
2. Government buildings should conform to local needs, should promote the spirit, ideals, and character of individual localities, and should be in harmony with the finest architecture in every locality.
3. All buildings erected by the Government should be designed by the best architectural talent available; and employ local engineers, contractors, and labor, and when feasible make use of local materials.
4. Government departmental procedure should be changed as necessary to avoid delay in the selection of sites, preparation of plans, and approval of preliminary and final plans for buildings.
5. Citizens of the United States should be made familiar with the designs of all proposed local public buildings, which are in the nature of permanent improvements to their communities.
6. Maintaining of architectural offices by the Government to design public buildings is fundamentally wrong in principle because it places the Government in direct competition with private business, contrary to the aims and ideals upon which the Government of the United States is based.

THEREFORE THE UNDERSIGNED RESPECTFULLY REQUESTS THAT.....

1. The Government refrain from maintaining an office to design public buildings in competition with the private business of its citizens.
2. The Government architect act in the capacity of a supervising and consulting architect and act as a liaison officer between government departments in the preparation of building programs, approve plans prepared by outside architects, and supervise construction.
3. The citizens of all communities in which public buildings are to be erected be afforded an opportunity to become familiar with the proposed site and design of all such buildings.
4. Departmental procedure be modified to provide for prompt decisions in matters connected with Government building activities.
5. Local architects, engineers, contractors, labor and materials be employed to the fullest possible extent, to the end that all proposed buildings shall serve the best interests of all communities and taxpayers of the United States.

Name — Firm — Address — Kind of business

« « « THE FIRST PETITION RECEIVED was from Portland, Maine. It was signed by nine architects, four banks, and thirty-three contractors and supply houses. This is a remarkable record, as there is no local organization of architects in Portland

•

THE TIME HAS COME FOR CONGRESS TO Reorganize the

By BENJAMIN

THE ability, earnestness, and zeal of the men at present responsible for the conduct of the Supervising Architect's Office, and the men entrusted with the preparation of plans and specifications for Federal buildings, is not questioned. On the whole, those familiar with the office refer to the personnel in high praise and the men in charge have earned the kind regard and high esteem of those who know them.

Judge Wetmore, Acting Supervising Architect, and Major Heath, Assistant Secretary of the Treasury, are reported to have stated that their relations with outside architects engaged to handle Federal projects have been most agreeable and that the work of these architects has been exceedingly satisfactory.

There is, therefore, in the present government building situation no element of personal animosity. There is no reason to expect that personalities will enter into the argument. Apparently the Office of the Supervising Architect is manned by well-meaning men of ability and good intentions But—it is decidedly questionable whether the department, organized on a creative or designing basis, is prepared to function efficiently in a supervising capacity.

Rumors are already current that architects are finding it difficult to obtain essential information or approval of plans as quickly as is necessary to permit them to complete their work with dispatch. This is to be expected from a bureaucratic system, and especially one that has been organized and accustomed to create work rather than to transmit information.

As the number of private architects selected to design

"It is my personal belief that, although SMOOTH WORDS were spoken and gestures made by government officials to representatives of the American Institute of Architects prior to ... last April, there was at heart NO SINCERE INTENTION of bringing about a situation whereby the buildings of the government would be the work of the profession at large in the nation."

Statement by A. L. Brockway, Director of the American Institute of Architects, before the regional conference of the New York State Chapters, held June 20, at Cooperstown, N. Y.

Office of the Supervising Architect

F. BETTS, A.I.A.

government buildings is increased, it is probable that it will become increasingly difficult for them to obtain prompt decisions through the Office of the Supervising Architect. Later on the result may be that these architects will be accused of being slow and of delaying the progress of the work. Reflection will thus be cast upon outside architects through no fault of their own. This condition should be foreseen and measures taken to correct the situation.

THE creation of a Federal Department of Public Works, as indicated in the report of the Board of Directors of the American Institute of Architects and approved at the Sixty-Fourth Convention of the Institute, apparently would be in effect a reorganization of the Supervising Architect's Office, giving it broader scope and resulting in its organization as a coordinating office. In scope it might well include the overseeing of all government building activities, now distributed in some sixteen or more departments. It could function to advantage as the representative of the government exactly as does the chief engineer of the American Telephone and Telegraph Company. This officer coordinates all departments of the company and, when a new building is needed, secures from the various departments their specific requirements. This information is transmitted to the architect selected to design the building. The chief engineer in this case is the contact man between the company and the architect throughout the construction of the building. There is no sane reason why the building construction work of the Federal government should not be conducted with the same efficiency, dispatch and common sense as that of a private owner. A Department of Public Works would permit this to be done.

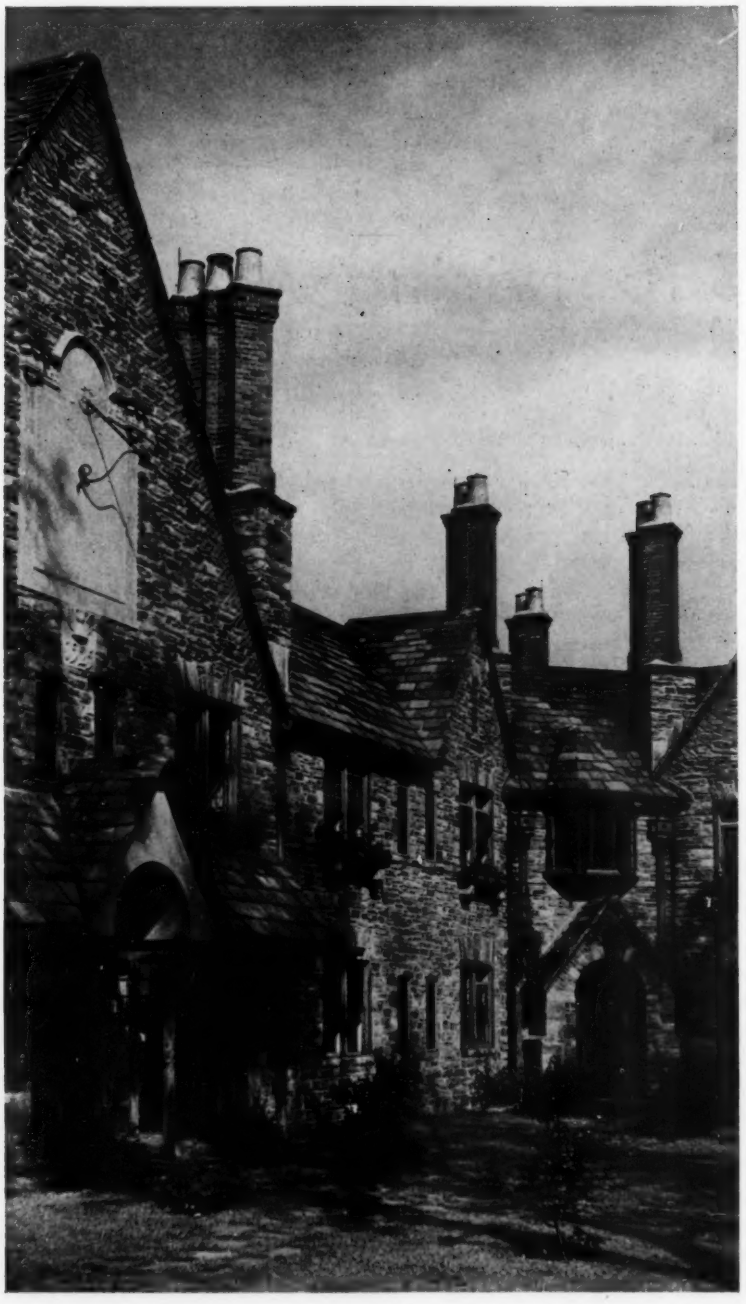
This country has behind it a wealth of experience in organizing and conducting numerous activities. No insurmountable difficulty should be found in organizing a Department of Public Works that would operate to the satisfaction of all citizens.

Under either a Department of Public Works or the existing system, it is of utmost importance that a method be found to select private architects with care and discretion. Capable architects, experienced in designing and building structures of the magnitude of various government buildings, are available in almost every section of the country. These firms should be sought out, their qualifications established, and their selection based upon merit. It is unreasonable to ask or expect one person to be so familiar with the work of all architects throughout the United States that he can assume the responsibility of selection. This should be the work of a carefully selected board composed of several representative citizens including one or more architects who, due to their position, would be ineligible to engage in Federal work. This board should be provided with facilities to determine the standing and qualifications of all architects eligible to design our Federal structures.

It is toward this vital end that all interested citizens should work in order to convince our government officials that a radical change (*Continued on page* 82)

CHIMNEY TOPS

From England and America

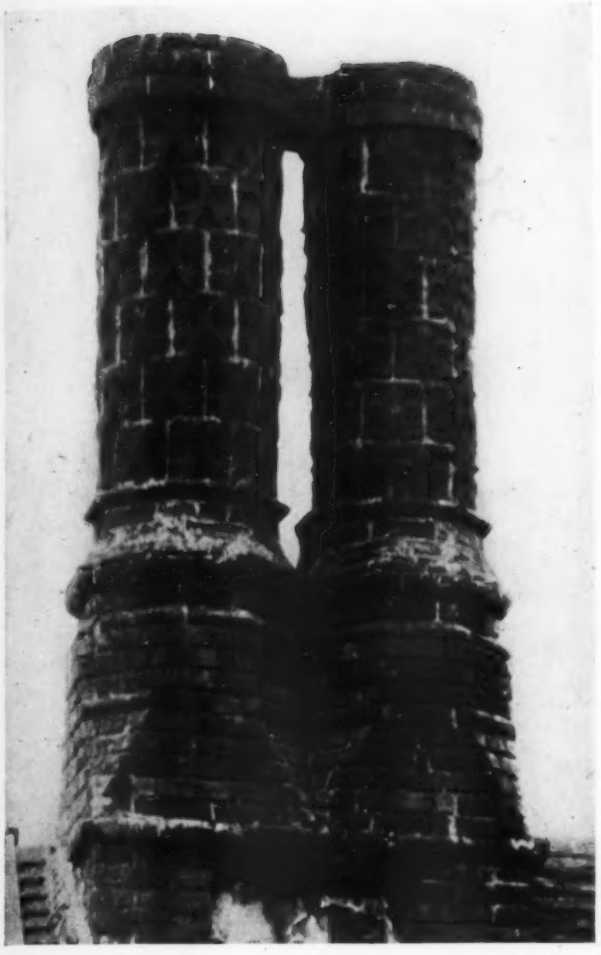


■

PURPOSE-MOULDED brick used in a pair of decorated shafts of Moot Hall, Aldeburgh, Suffolk. Bricks were plentiful; brickwork good and numerous different shades of color are noticeable in the Tudor brickwork of this section of old England

■

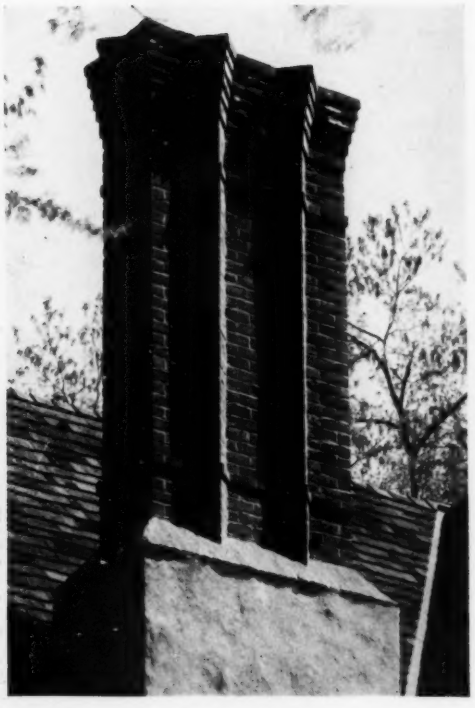
ONE HUNDRED ONE chimney pots, rugged red in color, are features of the Marcus Ward Home, Maplewood, N. J. Office of John Russell Pope, architects. Many of the stacks are ventilators



■ **TUDOR** chimney shafts are plentiful in Suffolk, England. The above pair from a residence at Ufford are good examples of the use of moulded brick in the form of fleur-de-lys and saltire in a diaper pattern

■ **CUT BRICK** for the shafts and a belt of moulded brick in the form of a quatrefoil diaper design of engrailed St. Andrew's crosses is a curious combination which is to be found at Woolpit, Suffolk, England

■ **TERRA COTTA** chimney shafts that simulate the patterns of older brick design. House of Theodore Swann, Birmingham, Ala., Warren, Knight & Davis, architects

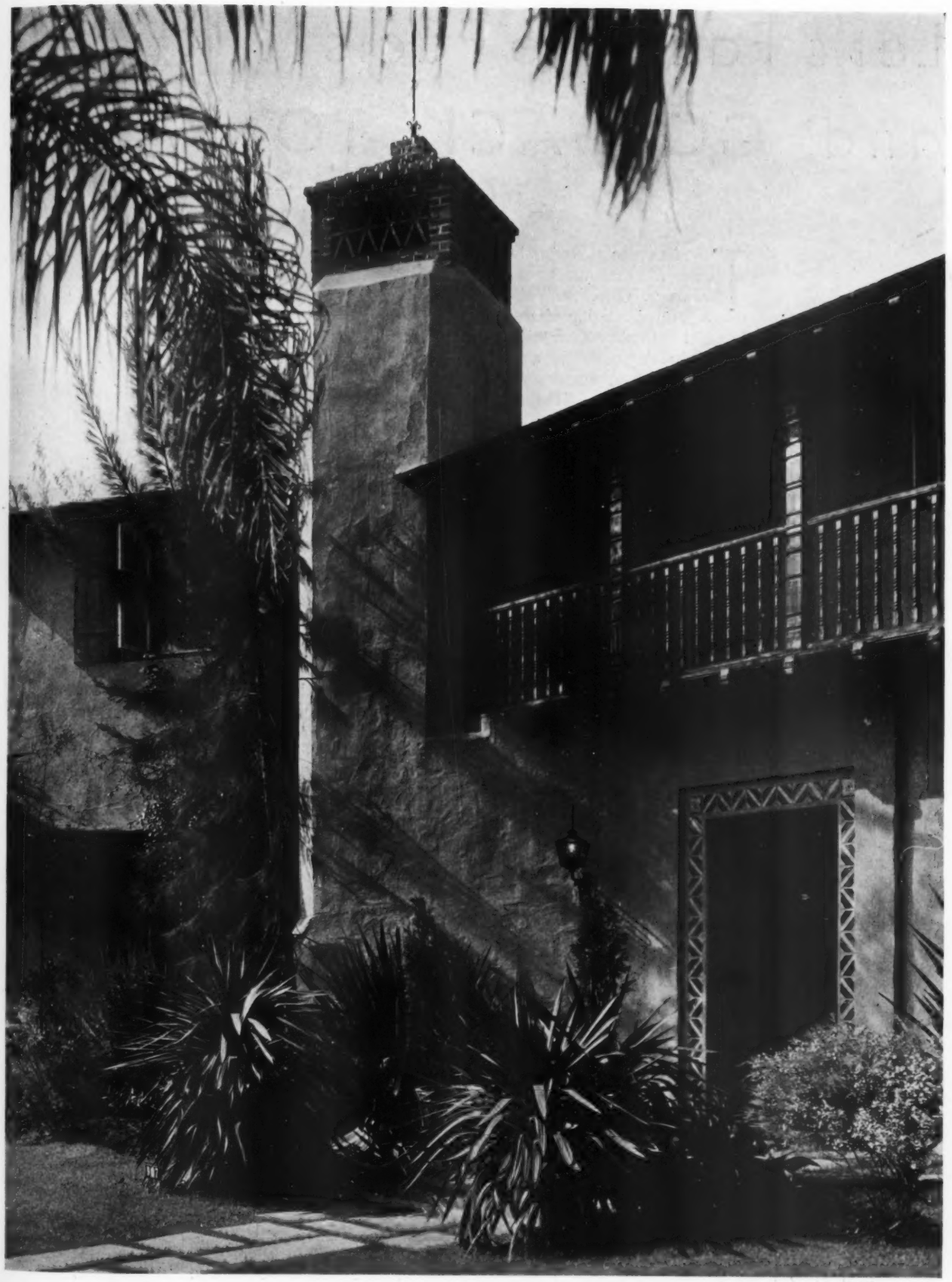


■ **STANDARD** size brick have been used in a decorative way in this chimney on a house located at Bronxville, N. Y. James J. Bevan, Architect

■ **VARIETY** in pattern has been obtained by the use of chimney pots of terra cotta. The Howard Coonley house, Milton, Mass., Prentice Sanger, architect

■ **COLOR** and form in terra cotta pots that combine well with the stonework. House of Louis Levi, Dobbs Ferry, N. Y. Taylor & Levi, architects

■ **FLEUR-DE-LYS** and saltire were favorite Tudor decorative motives. This triple chimney stack from a house built near Thwaite, Suffolk, England has been shortened and recapped



■ **MEDITERRANEAN** influence is evident in the design of this chimney which is a decorative as well as practical feature of this house at Beverly Hills, California

Let's Face the Facts . . . and GO BACK TO WORK

It is useless to wait for a big business recovery . . . We must start afresh from where we are NOW

By

JAMES DALTON

Industrial Editor of "Motor," one of the Hearst Business Magazines, which group includes The American Architect

TO face facts fearlessly is one of the attributes of courage. Close examination and interpretation often disclose that they are less dreadful than they have seemed. Only by such analysis is it possible to obtain all the necessary information upon which to base wise decisions.

Americans, as a race, are born optimists. They resolutely turn their backs on anything unpleasant. The debacle of 1929 did not come unheralded. It had been foreseen for months but the multitude, made up of high and low, rich and poor, paid no attention whatsoever to the danger signals raised by the facts they trampled under foot.

That was why the entire nation was staggered when a remorseless economic tide washed away the sand foundation upon which it had reared its house of cards.

The most gigantic bubble of security speculation the world has ever known was punctured 20 months ago and yet many Americans—perhaps a majority—still are waiting, with as much patience as they can command, for prosperity to return. Time after time they have been told by putative leaders that it has been "just around the corner" and that if they would buy without stint its coming would be miraculously accomplished.

One deception, deliberate or not, but none the less cruel, has followed another. The simple folk who believed what they were told, did as they were told so far as they could. Many of them went hungry to bed but they struggled manfully to believe they would be jobless only a little longer.

After 20 months of disaster and tragedy no concerted attempt is being made to tell the people of the United States what has happened and what they must expect. Economists, who should know, and probably do, still obsessed by a desire to cater to the followers of Pollyanna, are striving to find pleasant information to dispense. Their interpretations are made so obscure only an expert can tell what they are driving at. To the average reader they seem to breathe optimism. They have been saying for months that the depression has scraped bottom and that recovery is near.

It may be true that the bottom is being scraped but it is a lower bottom than has been reached since 1907. The consequences will be far reaching and today's schoolboys will be voters before we shall have recovered fully from them. The drop has been longer and more precipitate than any which has befallen us in 38 years.

Most of the public press skids delicately around the essential facts and prints only optimism—save in the stock tables. By written and spoken word leaders of commerce, industry and government still attempt to convey the impression that everything will be all right in a little while.

After 20 months isn't it time to get our best brains together, assemble the facts, interpret them, explain to the people what has happened and what to expect, tell them what they should do and try to guide them honestly? The average citizen is on the verge of panic. He has no one upon whom he can rely to advise him. He has lost faith in the once accepted leaders. He is fearful of disaster worse than is likely to befall. Frank acceptance and dissemination of (*Continued on page* 76)

THIS article was written before President Hoover startled the world with his proposal for a moratorium to save Germany from economic and political ruin.

Since then business sentiment, security and commodity prices have registered sharp advances. The moratorium undoubtedly will exert a beneficial effect. It may be the first step towards recovery but a long succession of steps must follow. If progress is to be sound and permanent it cannot be swift.

Prosperity rests upon volume of commodity consumption and profits of those who produce, fabricate and sell commodities. Purchasing power is the all-important factor.

» » » HERE IS THE PICTURE OF THIS COUNTRY TODAY

THE LEVEL IS LOWER than it has been since 1907, and the drop has been the longest and most precipitate in 38 years.

YEARS TO FULLY RECOVER from the depression are necessary because of its far-reaching effects.

NO SUDDEN "TURNING THE CORNER" can be expected. Even though the general trend of business is steadily upward, the slope will be so gentle that we shall have to look back to realize we have come up-grade.

NO FALL OR SPRING RECOVERY can be expected of more than moderate seasonal proportions, for there is apparently nothing upon which to reasonably base undue optimism.

NO GREAT NATIONAL SHORTAGES are to be supplied.

THE CONSTRUCTION INDUSTRY as a whole is overbuilt on everything except, perhaps, houses.

PUBLIC WORKS can enjoy no great expansion because federal, state and municipal governments are hard pressed for funds.

NO AUTOMOBILE SHORTAGE EXISTS, and estimates of replacement necessities have been exaggerated.

IRON AND STEEL can make but little progress as their principal customers are buying in diminished quantities.

AGRICULTURAL INCOME will show no great expansion.

FOREIGN TRADE can be expected to offer but slight help.

UNEMPLOYED have probably averaged five million for more than a year.

INDUSTRIAL WORKERS are mostly on part time.

SALARY CUTS have affected most "white collar" and clerical workers.

ANNUAL NATIONAL INCOME REDUCED from the 1929 level by fully twelve billion dollars.

ONLY MOST EFFICIENTLY MANAGED ENTERPRISES can hope to survive.

PRICES CANNOT BE RAISED, and the purchasing power of the dollar must be increased.

MERCHANDISING must evolve an entirely new concept.

SUCCESS OUT OF ADVERSITY is open to those who can solve present difficulties.

ENORMOUS QUANTITIES of goods of all kinds are being bought—and will continue to be bought—by the American people.

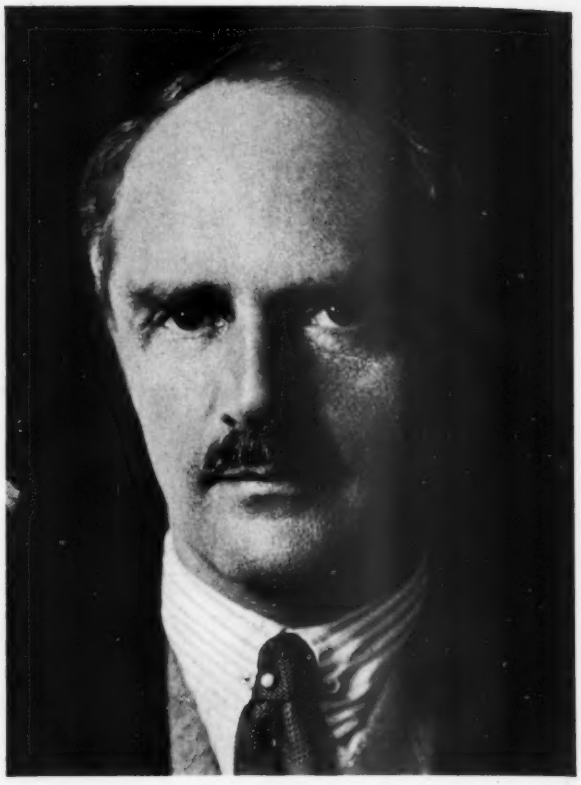
HOW YESTERDAY MADE POSSIBLE

Today's Swedish Architecture

An Interview by Eugene Clute with

IVAR TENGBOM

Architect, Director in Chief Royal Board of Public Works of Sweden



SINCE the beginning of the century, Sweden has seen the development of a number of tendencies which, interwoven, constitute the fabric of her architecture. This has come about naturally, progressively and on national lines. The results show continuity and consistency of character, the architects striving to solve their problems with sincerity in accord with the changing needs and thought of the times. This has given Sweden an architecture that is flexible and growing, as well as distinctly national and modern.

Director General Ivar Tengbom outlined this development in a very clear and interesting manner when the writer interviewed him for THE AMERICAN ARCHITECT during his stay in New York as Swedish Commissioner, at the exhibition of the Architectural League. Mr. Tengbom gave the key to the initial phase of the movement, during the first decades of this century, when he said, "After ransacking other countries, we at last discovered that Sweden possessed an architecture of her own, with an inherent force and individuality, which could reinforce and develop our own creations better than any foreign influence."

"After ransacking other countries, we at last discovered that Sweden possessed an architecture of her own, with an inherent force and individuality, which could reinforce and develop our own creations better than any foreign influence."

This led to the purposeful study of the earlier Swedish architecture in the remaining old examples and in descriptions and drawings of those that no longer existed.

Concurrently, there arose a keen interest in the handicrafts, in materials and their artistic use, stimulated by the study of old work. The importance of using good materials in buildings and of truth in construction was emphasized, and thorough, inspired craftsmanship in every detail was encouraged. Architects and laymen alike were stirred by these ideas. Men of liberal culture, wealth and position outside of the architectural profession gave their support to this movement. The services of many talented sculptors and painters were enlisted. Skilled workers in various materials, masons, wood workers, iron workers and others found a more lively appreciation of their abilities. As a result of these combined efforts, the handicrafts of Sweden, which had never been lost, arose to new heights.

Regarding this phase of development Mr. Tengbom said, "As the foremost supporters of this movement, two names merit mention before all others. They are Ostberg and Westman, in whose works, the Town Hall and the Law Courts in Stockholm, these strivings towards a common aim have found their highest expression. Of the above works, I believe especially the Town Hall is known over all the world as a beautiful structure, erected at a period when ordinarily more attention was paid to the materialistic point of view than to the idealistic. The building is a typical brick construction, the facades of a hand-made brick of a warm, deep red color. The location, on a point projecting into Lake Malaren in the town's center, is beautiful. To describe the interior would carry us too far. It may be sufficient

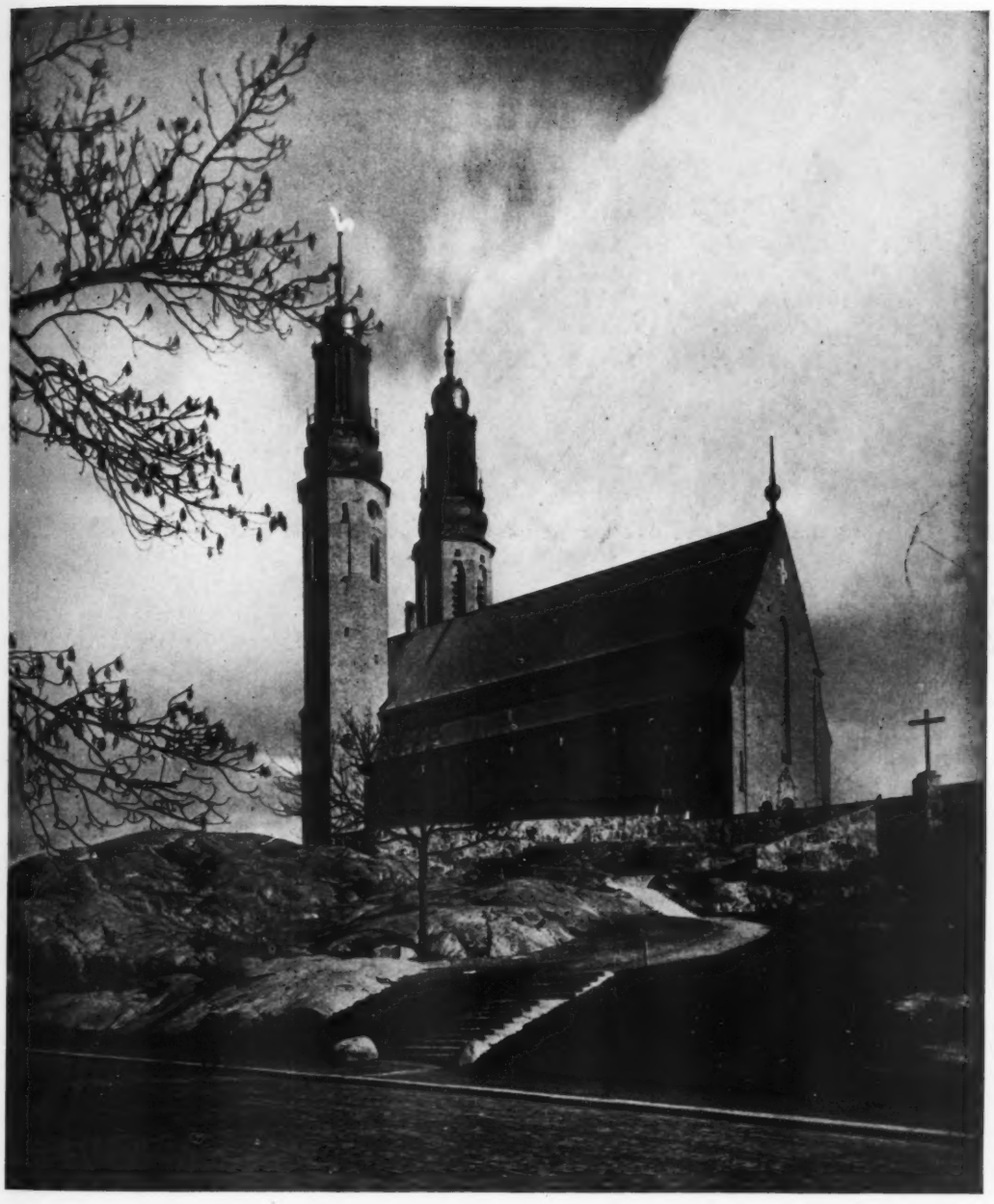
SWEDEN'S MOST FAMOUS MODERN BUILDING
Town Hall at Stockholm, Ragnar Ostberg, Architect

LAW COURTS in Stockholm, designed by Carl Westman, which, though characteristic of the best in modern Swedish architecture is reminiscent of the sixteenth century castle at Vadstena, shown below

to state that, for the construction of the monument of Swedish architecture, a great many artists of the country contributed their share—from the unknown craftsman to the foremost sculptors and painters. Among the latter, Prince Eugen should be mentioned. I think that the happy artistic cooperation in this building, the erection of which took about ten years, is the main reason for the attention the Town Hall has obtained in other countries. Many other buildings could be mentioned in which the same valuable combination of artistic talent has been employed."

The aim was not to recreate old styles of architecture, but to incorporate old forms, suitably modified, in modern buildings and to enrich these buildings with new designs embodying the best traditions and practice of old handicrafts. The general simplicity that has always been a characteristic of Swedish architecture was dominant. The roof lines, principally, recalled the old architecture together with details used sparingly upon plain walls that were made beautiful by the materials and workmanship. Such sixteenth century buildings as the Royal Castle at Vadstena, Ostergötland, on the shores of Lake Vättern, the castle at Kalmar, Småland, and the castle at Läckö,

ROYAL Castle at Vadstena, a sixteenth century structure which dominates the town. It is set in a square of four walls which rise from a broad moat



HOGALID CHURCH, Stockholm, a modern church in which the characteristic simplicity of Swedish architecture is dominant. Ivar Tengbom, architect

Västergötland, on an island in Lake Vänern afforded some of the most acceptable forms, together with certain old churches, such as the church at Varnhem in Västergötland.

New forces were at work, however. One was the more thorough recognition of the practical requirements for buildings intended to meet the diversified needs of the complex modern life. Another was the distinctive cultural refinement of the day. Then, too, there was the increasing use of modern materials—steel and reinforced concrete—permitting great slenderness of construction, to which people were becoming accustomed. Structural engineering came to exert a powerful influence upon design, replacing the heaviness of masonry vaulting and piers with the openness and lightness of wide spans and slender columns.

VARNHEM in Västergötland, a quaint old church with a marked but well controlled romantic tendency

WORKMEN'S HOUSES at Hastholmen, Stockholm, built in 1929. They are multiple dwellings, long and narrow, with ample sunlight and air in every room. Eskil Sundahl, architect

All of this was in keeping with the new spirit. To quote Mr. Tengbom: "It is the significance of a new technique and of new materials evolved therefrom that has here manifested itself, while at the same time the interest in Swedish tradition and in craftsmanship has formed a connecting link with the predecessors of this movement.

"These tendencies, with which I perhaps feel personally most closely associated, have found expression in such buildings, among others, as the Art Gallery and the Concert Hall in Stockholm, the latter one of my own works. It is often from classical traditions, which adapt themselves best to modern construction with their pronounced horizontal character, that these buildings have borrowed their motives. An offshoot of the same tendency, but with an especially pronounced esthetic aim, is represented by such buildings as the new City Library in Stockholm."

It is to be noted that the classic forms have been used often purely as decorations and in such a way that this fact is evident, the structural design of the building being complete without them. The portico on the front of the Concert Hall in Stockholm and the circular colonnade in the interior of the Crematory at Hälsingborg, by Ostberg, are examples of this.

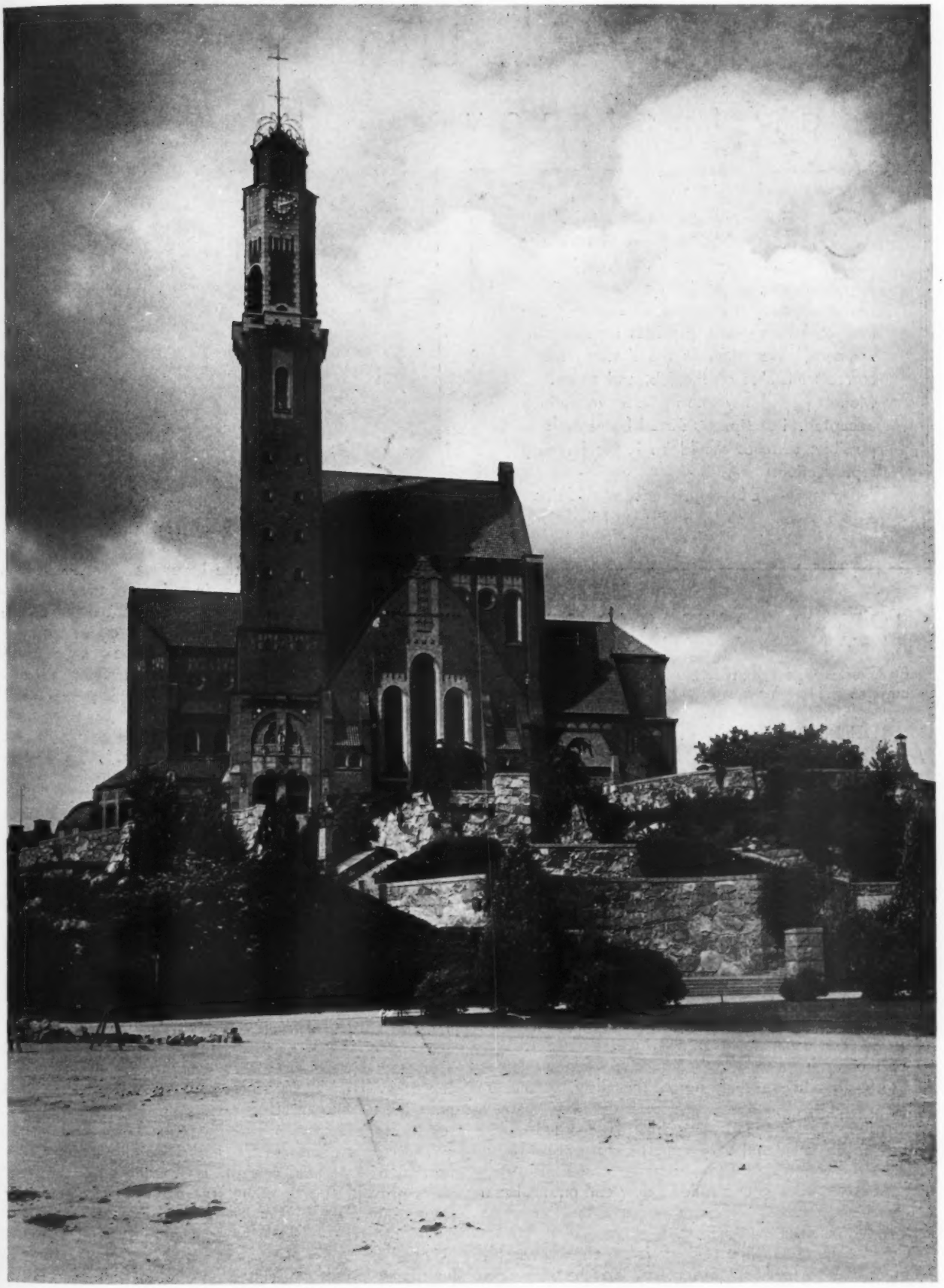
"New currents have appeared," said Mr. Tengbom. "They are the result of the social upheavals that have occurred all over the world since the War. Social and mass problems have become a primary interest, and the cult of mechanical technique, of new methods of building construction, or organization, has found fertile soil —a tendency toward the industrial, and thus to a certain extent, a thrusting into the background of the draftsman's art. The Stockholm exhibition last summer gave expression to these new aims in a more pronounced esthetic way."

Architecture is being directed into new channels. New materials and new methods of construction, the extended use of machinery and the development of mass production are working changes in design. The great need is for buildings that will serve useful purposes, with a minimum of expenditure for the sake of appearance. With this trend has come the type of buildings consisting of low rectangular masses, long familiar in some of the modern factories and dwellings of other European countries. A number of Swedish architects have endeavored, with more than the usual degree of success, to give to such buildings a characteristic kind of beauty, without increasing the cost or in any way reducing the functional value of the buildings. A notable example is the building for students at the Technical High School in Stockholm by Sven Markelius and Uno Ahrén. Agreeable effects are often produced by the simplest means, such as the use of a dark band of sheet copper turned down over the top of the wall, to draw a sharp line that gives smartness to the design. One of the characteristics of modern Swedish architecture is the lightness of parts that are of strong materials. There is no excess weight; parts are figured for the service they will have to render and are not overdimensioned.

Another example of a simple but effective means of drawing a line at the top of a building of functionalist design is the use of a metal gutter set a short distance below the top of the wall. This is seen on some recent buildings.

Even the church architecture of Sweden is following the very pronounced tendency to design in plain rectangles. An example is a new church for Appelviken, a suburb of Stockholm, by Birger Borgström; even the bell tower has been transformed and appears as a heavy wall with a penetration in its upper part in which the bell is hung.

Large panes of glass are the rule in the new buildings in Sweden and casement sash are universal. A special type of casement is (*Continued on page* 98)



CHURCH AT ENGLEBRECHT, Stockholm. A fine composition on a rocky hill. Built in 1922, it set a style that reclaimed a rundown neighborhood into one of the most beautiful suburbs in Sweden

» » » ALL IN THE

Ideas that have solved some

ON these two pages are typical examples of what the editors desire for this new department, which will appear from time to time as material warrants—anything that solves an unusual problem, conserves space, provides unusual convenience, saves time in the drafting room, corrects mistakes on the job, and so on.

Modest payment will be made for every idea accepted. Descriptions should be as short as possible; sketches should be in ink for easy reproduction.

Address the Editors, American Architect, Eighth Avenue at 57th Street, New York.

• ROTTED POSTS AND BEAMS REPAIRED WITH CONCRETE

By Charles C. Hurlbut of Hurlbut & Van Vleck, Engineers, New York

A DIFFICULTY frequently encountered in renovating an old building is the repair of decayed timbers. Several cases of this sort have been repaired by the writer by the use of reinforced concrete.

The repairs illustrated are of an old farm-house built over one hundred and twenty-five years ago. In renovating the interior a small hole was discovered near the end of one of the floor beams and an investigation revealed that the end of the beam was completely rotted away and was merely a hollow shell with no strength whatever for a distance of eighteen inches or more from the post. Furthermore, the post at the joint was completely gone and the cavity extended down into it about two feet below the bottom of the beam. The beam seemed to be held up by the floor boards rather than the reverse. The construction is shown in Figure 1.

As the beams were exposed in the room a method had to be found that would not be unsightly. Of course the defective timber could have been cut out and new pieces carefully spliced in place, but that method would require much labor and very expert carpentry work, as well as the wrecking of considerable finish. Furthermore, it is very difficult to splice a new end onto a beam and make a joint of adequate strength that will look well if the beam is exposed.

The problem was approached from an engineering point of view and reinforced concrete seemed to offer a solution. The repairs were accordingly made as shown in Figure 2, and will be described. This work has now been finished and in use for over a year and has proved

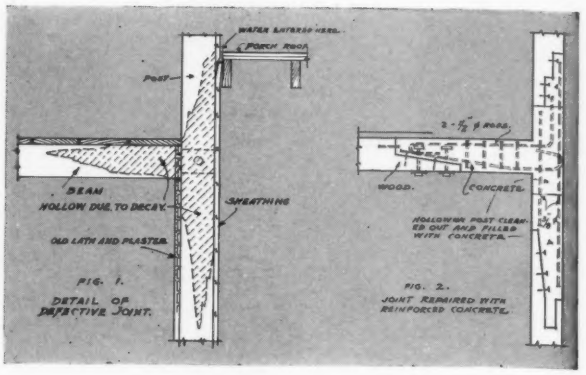


FIG. 1. DETAIL OF DEFECTIVE JOINT.

FIG. 2. JOINT REPAIRED WITH REINFORCED CONCRETE.

perfectly satisfactory. No cracks have developed in either the concrete or the wood and the change in material is not noticeable.

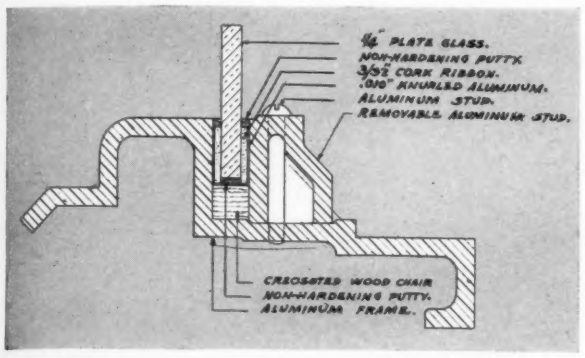
In making the repairs the beam was first shored up from the floor below and a few floor boards were removed with enough outside sheathing to get at the defective parts. The beam was then cut off in the manner of a scarf joint as shown, and all the decayed wood carefully removed from the post. The loads were computed and the beam end designed just as would be the case in a reinforced concrete structure. Reinforcement was computed and placed in position and amount where needed. The reinforcement in the beam extended into the column and was hooked around the vertical rods in the column pocket.

In the same house there were several other cases of badly decayed posts, in one of which the decayed pocket extended from the sill upward for a height of four feet. This post was exposed in the room like a pilaster and it was desired to retain it. On the room side the wood appeared sound, but was only a thin shell. However, if the post were cut off and a new piece inserted, the effect of the old timber frame would be lost and the joint would be apparent even if an old timber could be found to match. It was decided therefore to leave the shell and fill it with concrete. This was done, as in the other case. The sheathing was removed and the post opened from the outside for the full length of the picket. All the decayed wood was cut out, a few rods inserted and nails driven into the sides to tie the wood and concrete together. The pocket was then filled with concrete.

The concrete used in all cases was mixed in the proportion of one part cement, two parts sand and four parts gravel. It was mixed rather dry and thoroughly rammed in placing. Forms were used where necessary, as on the outside faces of posts and the sides of the beams mentioned above. In the latter case chestnut boards were used with grain similar to the grain of the beam. The concrete was stained to match the wood as nearly as possible and the fact that part of the beam is concrete is hard for most people to believe.

DAY'S WORK

problem or made a job easier



• KEEPING LARGE GLASS AREAS FROM BREAKING

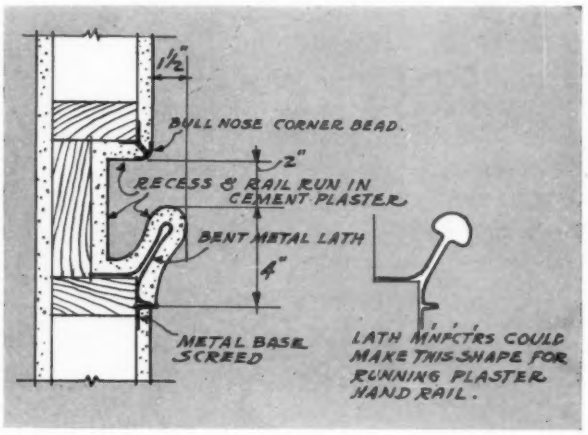
By E. C. Frazier, Industrial Service Section, Armstrong Cork Company, Lancaster, Pa.

IN the building of the A. O. Smith Corporation, Milwaukee, there are 262 windows 12′ x 14′, and 46 windows 12′ x 16′ consisting of ¼″ plate glass. The edges of the glass rest in an aluminum channel consisting of two parts and so constructed that the glass can be slipped easily into one section and then held in place by the second section, which is bolted into place against the opposite side of the glass.

It was discovered that, with such large panes of glass, there would be a severe strain on the edges caused by vibration when the wind velocity was high. It has been determined that with a thirty mile wind, there would be a movement of the glass at the edges of approximately .040″. This movement would occur many times per minute, producing a scraping action of the glass against the aluminum and creating an unpleasant noise.

Cork composition in ribbon form was placed between each side of the glass and the aluminum channel around all four edges. In addition to this use, which is illustrated in the above sketch, some small strips of the same material 3 inches long were placed at intervals of 2 feet on each of the side edges, being placed between the edge of the glass and the bottom of the channel.

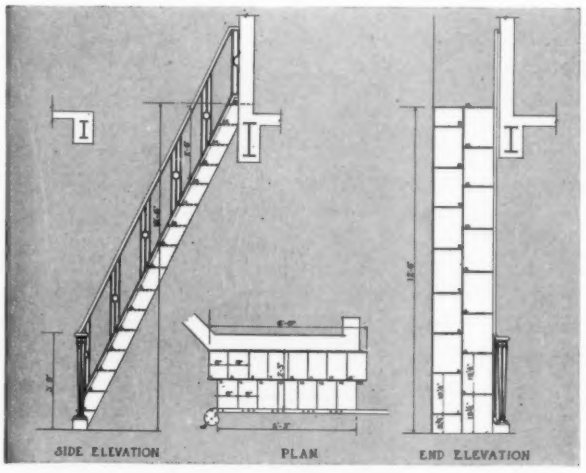
The actual assembly consists of a U-shaped piece of .010″ knurled aluminum fitting snugly inside the channel. Between this piece and the glass, cork ribbon is placed, the knurling on the aluminum holding the cork securely in place. At the bottom of the U is placed a 1/16″ layer of non-hardening putty to act as a lubricant. On the bottom edge, this assembly rests on a creosoted wood chair, while on the side edges the assembly rests against the small cork strips previously mentioned. The purpose of these short strips at 2 foot intervals is to compensate for expansion and contraction and to take up any unevenness caused by the glass not being cut exactly square.



• STAIRWAY WIDTH CONSERVED

By Lancelot Sukert, A.I.A., of Sukert & Cordner, Detroit

WHERE space is limited, the handrail may be recessed and run with but a 1½″ projection, making it possible to provide the necessary width and yet have a handrail in places required by the building code.



• STEEP STAIRWAYS MADE SAFE

By A. H. Albertson, A.I.A., of A. H. Albertson & Associates, Seattle, Wash.

THE stairway to the "captain's walk" in the Northern Life Tower Building, Seatle, Wash., is a unique solution of a steep yet serviceable stairway that requires little space. Note that the stairs are split in the middle and that the treads are staggered to accommodate a full step for each foot, in going either up or down. While the rise of each section is 19½″, staggered treads give the same result as a stair with 9¾″ risers.

FIRST PRIZE, CLASS A

Wabash Avenue Bridge, Chicago. Cost $1,750,000. Designed by Thomas G. Pihlfeldt, engineer of bridges

JUDGED THE MOST BEAUTIFUL

Steel Bridges

BUILT IN 1930

FIRST PRIZE, CLASS C

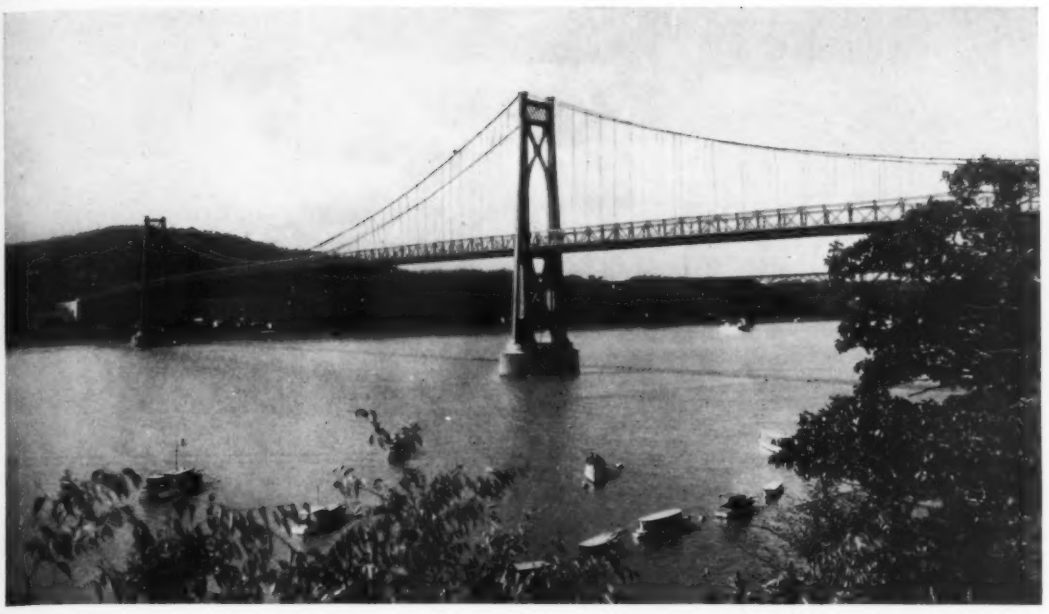
Delton Bridge, Sauk County, Wis. Cost, $54,000. Designed by the Wisconsin State Highway Commission

THE third annual competition conducted by the American Institute of Steel Construction for the most beautiful steel bridges erected in the United States and Canada resulted in awards being made as pictured on this page.

Class A was for bridges costing over $1,000,000, Class B between $500,000 and $1,000,000 (no awards, because no entrant of sufficient merit was recorded), and Class C, under $500,000.

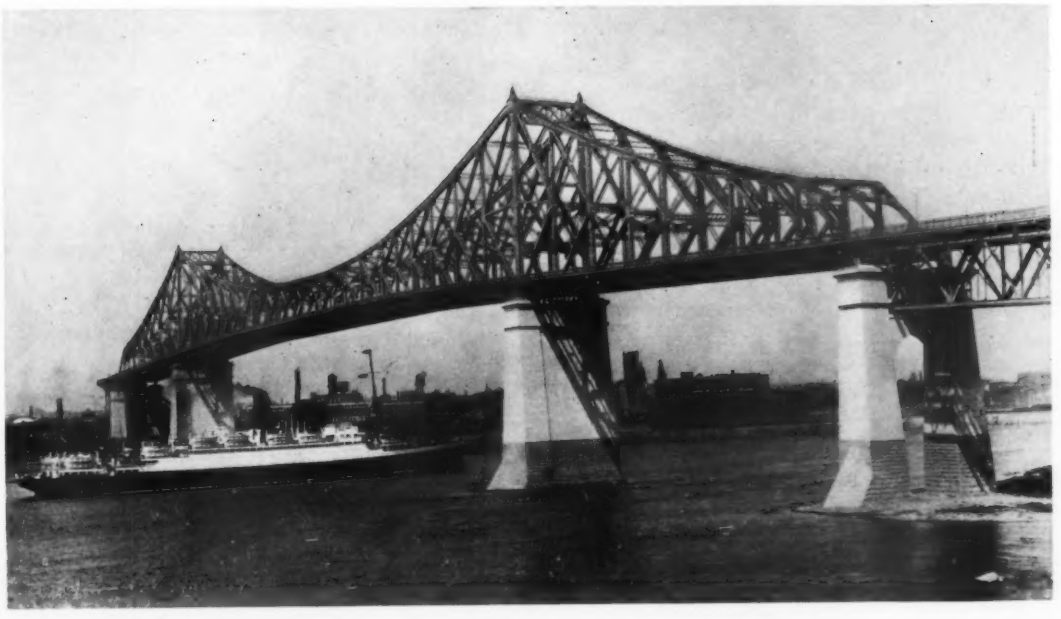
The jury consisted of Francis Lee Stuart, president of the American Society of Civil Engineers; Robert D. Kohn, president of the American Institute of Architects; Frederick L. Ackerman, A.I.A.; Dr. William H. Burr, consulting engineer; and Benjamin F. Betts, A.I.A., editor of The American Architect.

Awards were made on the basis of a proper use of the material, skill shown in arriving at the solution of the problem, and consideration of the general condition under which the bridges were built.



FIRST HONORABLE MENTION, CLASS A

Mid-Hudson Bridge, Poughkeepsie, N. Y. Designed by Ralph Modjeski and Daniel Moran



SECOND HONORABLE MENTION, CLASS A

Montreal Harbor Bridge. Designed by Monsarrat & Pratley

HONORABLE MENTION, CLASS C

Lachine Bridge, Lachine, Canada. Cost $3,100. Designed by R. Dorion, city engineer

» » what to tell your lawyer

WHEN YOU SUE

By Emery Stanford Hall, F.A.I.A.

MR. HALL acted as Secretary of the Illinois Society of Architects from 1905 to 1914. He writes, "During that period pretty nearly every architect in Chicago who had to go to court to collect his bill called me in as a witness." Mr. Hall wrote the "Articles of Agreement" reproduced on the facing page

THE legal rights of the architect are but faintly understood by the architectural profession and hardly more by the legal profession. This is because, in order to understand the right of its clients, the legal profession must first understand these clients.

To understand anyone, one must be able to visualize that person's viewpoint. In other words, be able mentally to dramatize his life purpose. The lawyer has to get his knowledge of architectural purpose from his architectural clients. If they do not understand something of the moving of the legal mind, they are unable to tell their story to their lawyers effectively.

The legal mind is bred and trained to believe that there is no right to demand remuneration unless there is an equitable consideration. The lawyer must have properly built equity as a basis for a legal claim. He has to believe in the equity of his client's claim in order to adequately present it. He is trained to talk. Of words, he has many. His repertory is stored with tricks of phraseology and word weapons of persuasion, but he does not score in a court of real discernment and exact integrity unless he believes in the just equity of his case. Both judges and juries are affected by the sincerity of the advocate's plea. They are human, they cannot help it.

The sentiment of architects is rightly opposed to corrupt court or legal practice and were it not, the emoluments of architecture are not sufficient to make it possible for the architect to yield to them. The very existence of architecture is dependent upon its absolute integrity and judicial fairness of expert decision. With these principles bred in the bone, it is impossible to consider any methods of seeking justice other than on the basis of fair equity.

The equities of architectural service, for which an architect has a right to demand remuneration, must be clearly defined in order to make them tangible to judge, jury and advocate. It is the duty of the advocate to make them clear to judge and jury. If he is selected

1—WHAT ARCHITECTURAL SERVICE consists of should be clearly explained, including:

a . . Notes, preliminary studies, and all other data used to develop the architectural problem

b . . Why plans and specifications are merely a means to an end

c . . Long and expensive education and practical training of the architect

d . . Working and reference library built up through many years, catalog files, etc.

e . . Draftsmen and others who have to be employed and paid in order to give preliminary service to the client.

2—DIFFERENCE BETWEEN the professional service of an architect and the business activity of a general contractor

3—FEASIBILITY OF PROJECT and its earning power are determinable only after the architect has done most of his work

4—ONLY THE OWNER is served by the preliminary work, for it was done for a particular site and a particular purpose—it is of no use to any other client

5—TIME AND LABOR are involved in the evolution of mass and detail, provable by preliminary studies

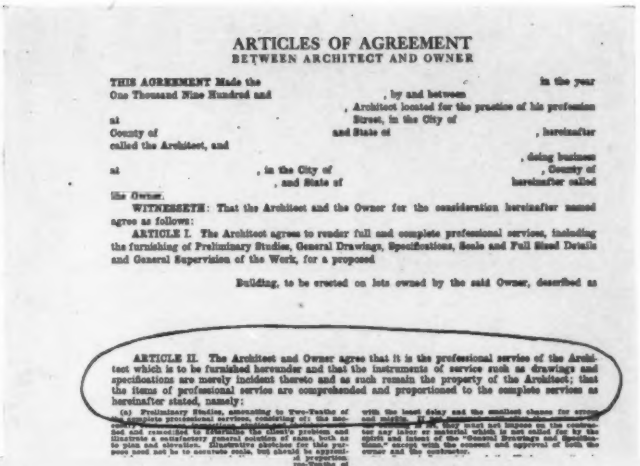
6—EXPERT JUDGMENT expressed without thought of personal interest is what the owner buys and pays for

7—SUPERVISION requires expert decisions, considerable time, and frequently the salary of an employee paid by the architect to protect the owner's interests

8—CONTRACTS are arranged and drawn up, contacts made for estimates, and other detail work done by the architect

LAWYERS AND JUDGES WERE INFORMED . . .

as to the services rendered by an architect by a series of direct mail pieces sent out by the Illinois Society of Architects to the entire state bar association and judiciary. This campaign has had an important influence on court decisions



ARTICLES OF AGREEMENT
BETWEEN ARCHITECT AND OWNER

THIS AGREEMENT Made the in the year
One Thousand Nine Hundred and , by and between
, Architect located for the practice of his profession
at Street, in the City of
County of and State of , hereinafter
called the Architect, and
, doing business
at , in the City of , County of
, and State of hereinafter called
the Owner.

WITNESSETH: That the Architect and the Owner for the consideration hereinafter named agree as follows:

ARTICLE I. The Architect agrees to render full and complete professional services, including the furnishing of Preliminary Studies, General Drawings, Specifications, Scale and Full Sized Details and General Supervision of the Work, for a proposed

Building, to be erected on lots owned by the said Owner, described as

ARTICLE II. The Architect and Owner agree that it is the professional service of the Architect which is to be furnished hereunder and that the instruments of service such as drawings and specifications are merely incident thereto and as such remain the property of the Architect; that the items of professional service are comprehended and proportioned to the complete services as hereinafter stated, namely:

(a) Preliminary Studies, amounting to Two-Tenths of the complete professional services, consisting of: the necessary conferences, preliminary studies, sketches, etc., required and necessary to familiarize the client's problem and illustrate a satisfactory general solution of same, both as to plan and elevation. Alternative sketches for this purpose need not be to accurate scale, but should be approxi-

with the least delay and the smallest expense for accuracy and quality. It is understood that the Owner may not impose on the contractor any labor or material which is not called for by the spirit and intent of the "General Drawings and Specifications," except with the consent and approval of both the owner and the contractor.

THAT DRAWINGS AND SPECIFICATIONS ARE MERELY INCIDENTS . . .

of an architect's professional service is clearly stated in an "Agreement" of the Illinois Society of Architects. A copy may be obtained at cost from H. L. Palmer, 160 North La Salle Street, Chicago

Just what does an ARCHITECT do for his CLIENT?

The services of a present-day architect are commonly divided into five stages. These are often called the five fundamental functions of an architect and are described as follows:

1 "PRELIMINARY STUDIES", which are really the diagnosis of the building problem, proceed first with the careful questioning of the client as to that which he wishes to accomplish. In this study the architect must be sufficiently familiar with human desire to read between spoken words the unexpressed wish.

And to these wishes he must add those things which his own skill and experience dictate as essential to the full, up-to-date solution of the client's problem, such as location of rooms to assure convenience and comfort, straight-line routing of materials in industrial buildings, etc.

In studying these problems the architect must also consider site conditions, present and future land values, relationship to transportation, adjoining property conditions, public utilities including sewerage, gas, water, heat, electricity, etc.

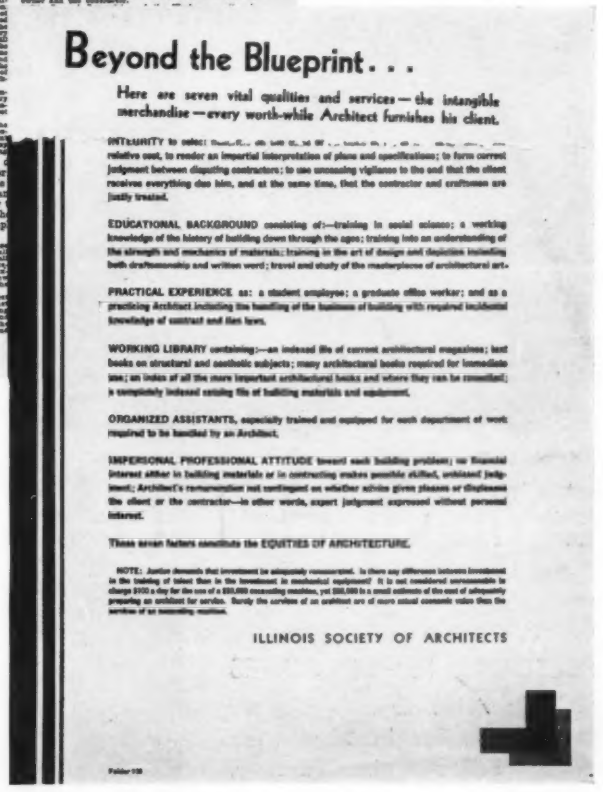
After the plan scheme is worked out, the architect must then design a building dress that shall be a logical interpretation of the plan—pleasing in aspect, harmonious in color combination, and at a cost appropriate to character of use and neighborhood standards.

The architect next prepares an approximate estimate of cost. This is based on floor areas, volume and similar tentative factors. No accurate estimate can be made until working drawings and specifications determine actual quantities of material and labor.

At this point the architect consults with the client as to whether he wishes to proceed with the original scheme as outlined, or if it should be modified to reduce cost, or to increase efficiency or ornamentation. Should changes be desired, they are worked out in preliminary form and a new approximate estimate prepared.

NOTE: Standard forms of agreement between the architect and his client provide that "Preliminary Studies" shall be modified and remodified by the architect until the client's problems have been solved. During this period the client may, within reason, change his mind as to a given project as many times as he desires, and without involving himself in extra expense. This "Preliminary Study" work usually represents about one-fifth of the architect's complete service.

2 "WORKING DRAWINGS" to scale are now made up. In this second important function of an architect, he prepares drawings which



Beyond the Blueprint. . .

Here are seven vital qualities and services — the intangible merchandise — every worth-while Architect furnishes his client.

INTEGRITY to exact

relative cost, to render an impartial interpretation of plans and specifications; to form correct judgment between disputing contractors; to use unceasing vigilance to the end that the client receives everything due him, and at the same time, that the contractor and craftsmen are justly treated.

EDUCATIONAL BACKGROUND consisting of:—training in social science; a working knowledge of the history of building down through the ages; training into an understanding of the strength and mechanics of materials; training in the art of design and depiction including both draftsmanship and written word; travel and study of the masterpieces of architectural art.

PRACTICAL EXPERIENCE as: a student employee; a graduate office worker; and as a practicing Architect including the handling of the business of building with required incidental knowledge of contract and lien laws.

WORKING LIBRARY containing:—an indexed file of current architectural magazines; text books on structural and aesthetic subjects; many architectural books required for immediate use; an index of all the more important architectural books and where they can be consulted; a completely indexed catalog file of building materials and equipment.

ORGANIZED ASSISTANTS, especially trained and equipped for each department of work required to be handled by an Architect.

IMPERSONAL PROFESSIONAL ATTITUDE toward each building problem; no financial interest either in building materials or in contracting makes possible skilled, unbiased judgment; Architect's remuneration not contingent on whether advice given pleases or displeases the client or the contractor—in other words, expert judgment expressed without personal interest.

These seven factors constitute the EQUITIES OF ARCHITECTURE.

NOTE: Justice demands that investment be adequately remunerated. Is there any difference between investment in the training of talent than in the investment in mechanical equipment? It is not considered unreasonable to charge $100 a day for the use of a $50,000 excavating machine, yet $50,000 is a small estimate of the cost of adequately preparing an architect for service. Surely the services of an architect are of more actual economic value than the services of an excavating machine.

ILLINOIS SOCIETY OF ARCHITECTS

wisely, the lawyer can be trusted to do his part. It is his art. It is up to the architect to sell his legal advocate as to the actual equities of the practice of his craft. In such matters, the average architect is like the stammering school boy who said, "I know but cannot tell." It is the paramount task of every architect both to know and to be able to tell clearly so as to visualize accurately just what is valuable in an architect's service and why.

The architect's social obligation to the community, his duty to his client, and his personal necessity with his advocate makes it the architect's duty to define clearly the equities of architecture. Failure to define clearly the actual consideration in contracts for service has cost many an architect his just remuneration for services rendered. A contract with inaccurately defined considerations is a serious handicap in any law case. It is not an extravagant statement to say that more than a majority of contracts which are now drawn between architects and owners do not clearly define what the architect is to do for the remuneration which is demanded of the client. In many of these, if not most of them, the consideration mentioned in the contract is not the consideration at all but only an incident to the consideration.

A lawyer does not make a contract to write so many pages of briefs and make so many pleadings before the court. Neither does a physician bill for so many prescriptions. Yet, a large percentage of contracts between owner and architect are for the merchandise of plans and specifications, plus in some cases the service of the supervision of construction. It would be hard indeed to prove that material, plans, specifications, and details without supervision constitute an equitable consideration equal to the common commission reckoned fee amounting to 4.2% of the cost of erecting the proposed building. It would not be difficult to prove that the natural talent, training, and experience, plus time and the overhead necessary to (*Continued on page* 88)

CABOT STREET
BOSTON
JONES

ETCHINGS . . .

By

PRESCOTT M. M. JONES
of Rockport, Mass., whose etchings have been exhibited in most of the principal print shows in this country.

WOODRUFF K. AYKROYD
a draftsman, Toronto, Canada. A book of his sketches, "Travel Sketches in the Old World," is now on the press of a Chicago publisher

ALFRED EASTON POOR
a former holder of the Woodman Travelling Fellowship in Architecture, and associated in the practice of architecture with Robert Perry Rodgers in New York City under the firm name of Rodgers & Poor

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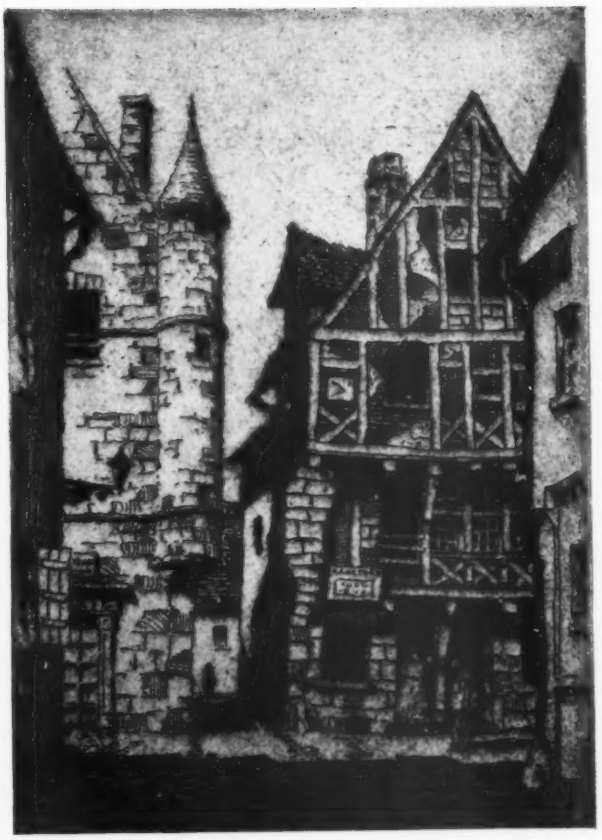
"VANGUARDS OF THE STORM" JONES

CAUDEBEC-EN-CAUX

JONES



CHINON, FRANCE

AYKROYD

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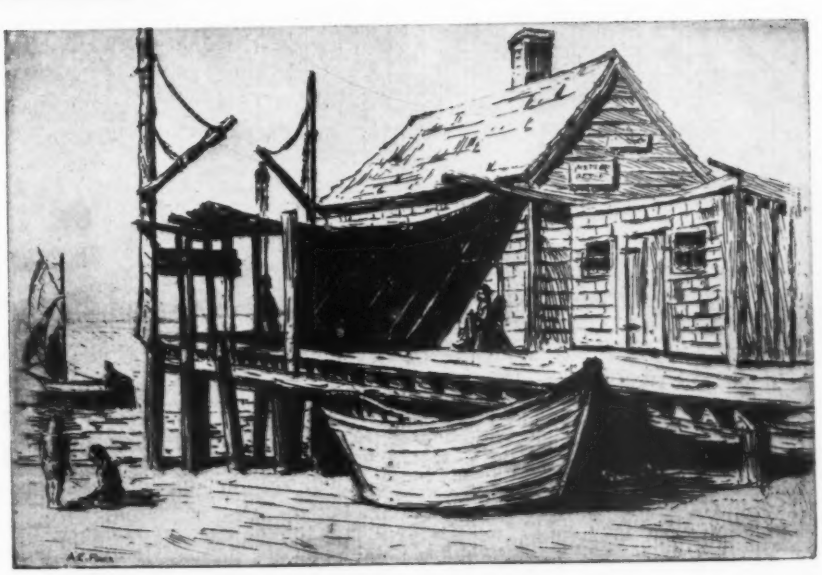
FISH WHARF
PROVINCETOWN

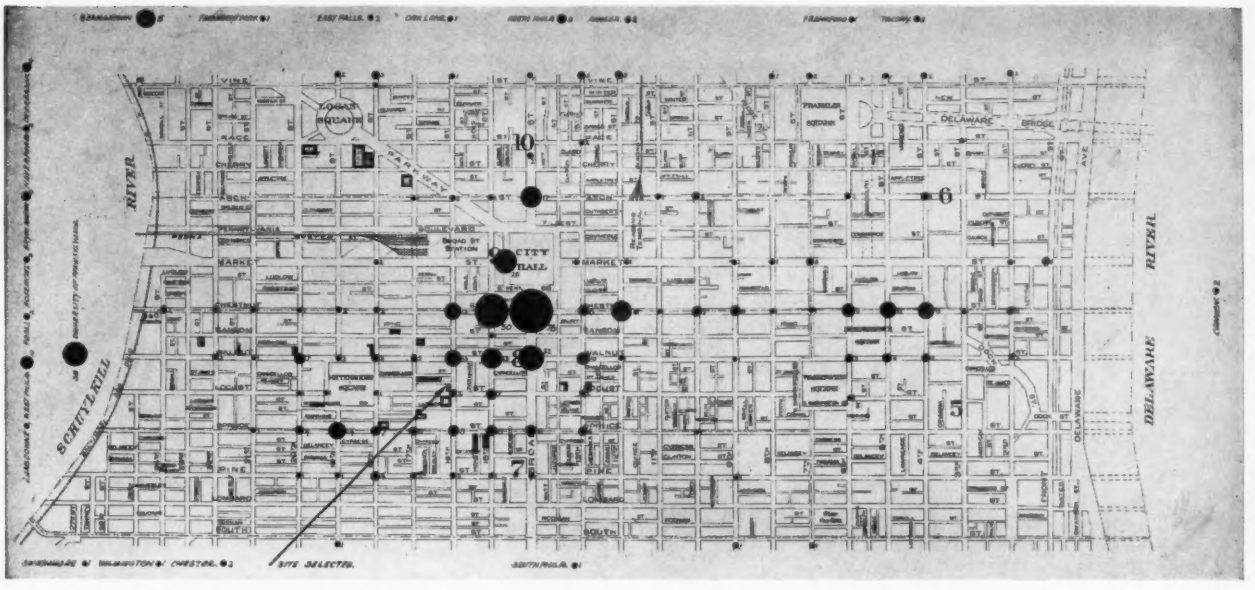
POOR

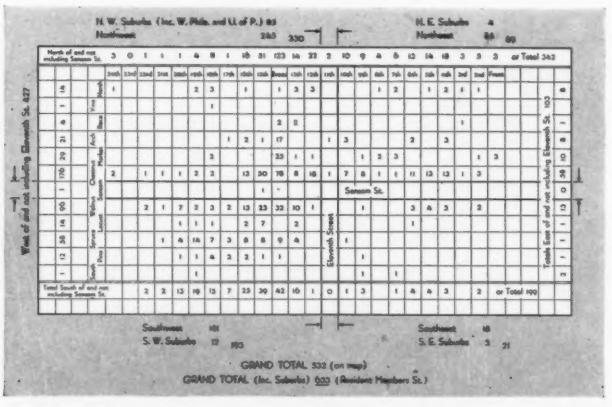


How Research Showed
WHAT TO PLAN FOR

By Grant M. Simon, A. I. A.

The story of what was done before starting to plan the University Club Building, Philadelphia



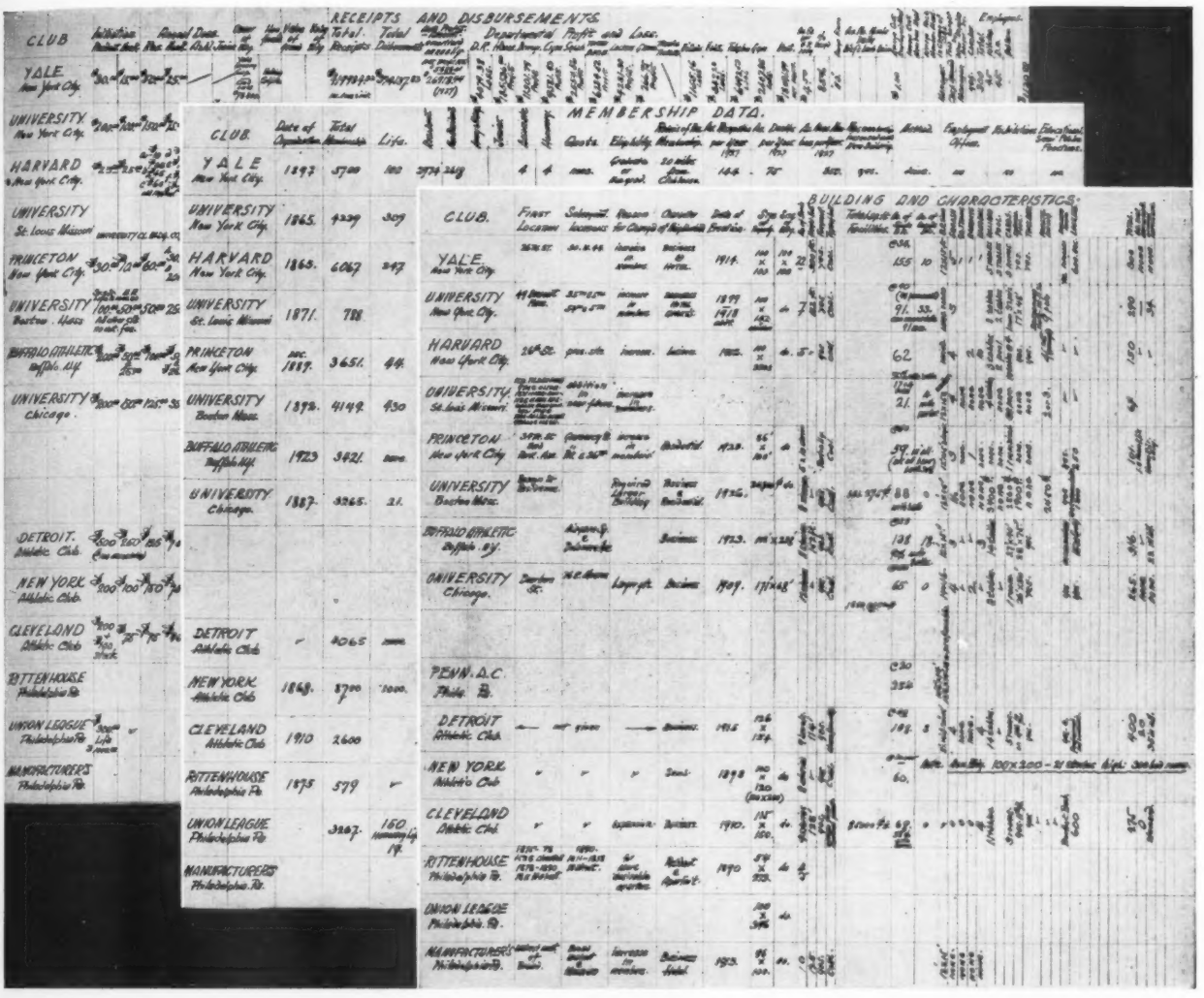


LOCATION WAS DECIDED UPON after preparing a chart, shown at left, to locate the number of members in each section of the city. Then the totals were transferred to a map, shown above, so that the number of members in each section could be seen at a glance. Thus it was easy to decide which of several available locations would be most convenient

RESEARCH in connection with the design of buildings is always not only of value but highly important. This is true of any type of building and particularly true of club buildings. Its value was proven in the case of the University Club of Philadelphia, where the importance of preliminary investigation was clearly demonstrated. To correctly understand the ultimate solution and interpret the analysis, some knowledge of the local situation at the time of building the club is desirable.

The University Club of Philadelphia is the oldest university club in America. Becoming to its age are its traditions and customs. For thirty years it had occupied a brownstone building on Walnut Street built in the 40's. The old ways were continued, and the members grew accustomed to inconveniences that would not now be tolerated.

But time changes all things—including realty assessments. And so, after many committees had met and adjourned, and in the meantime all had concurred in the



OTHER CLUBS WERE INVESTIGATED to determine the relationship between size of building, membership, income, and operating expenses; and to afford a basis for analyzing the various income producing departments as to space occupied and income of each

opinion that the club must move, a building committee was appointed, and an architect chosen.

The problem was a difficult one. While it was agreed that a change of residence was imperative, the end of the pilgrimage was wrapped in a fog of conflicting opinions. Some favored a small luncheon club, some an alteration of another old house, and some a fully equipped and elaborate house on the Parkway.

The club owned a valuable site on an important street, members had grown accustomed to its convenient location; they would not walk very far to a new site. There were serious financial problems to be met. There were, in short, many opinions and many problems.

Numerous locations were considered, including sites on the Parkway. Local customs and the Market Street barrier, a Philadelphia social idiosyncrasy, dictated the selection of a site nearer the business and financial center. The business addresses of the resident members were plotted, and the site chosen is adjacent to the greatest density of membership population.

This location with three street frontages, but with an area of only 4700 square feet, is probably one of the smallest building sites occupied by an important club. To secure advantageous use of the site air rights were acquired on the fourth side of the plot.

Preliminary to establishing a definite program for the design of the building, a survey and analysis of the then existing club house facilities were made. Some fourteen clubs in the East were visited and data accumulated pertaining to their membership, finances, operation, maintenance, and physical characteristics. This data was analyzed and a series of charts prepared to afford a basis of comparison of different clubs.

As a result of this study the following general considerations were incorporated in a preliminary program:

1. A belief that the various departments of the club could be operated without a yearly loss. This is fundamental.
2. It was observed in all the clubs visited that the greatest net revenue was derived from the sleeping rooms. The effort then was to determine the maximum

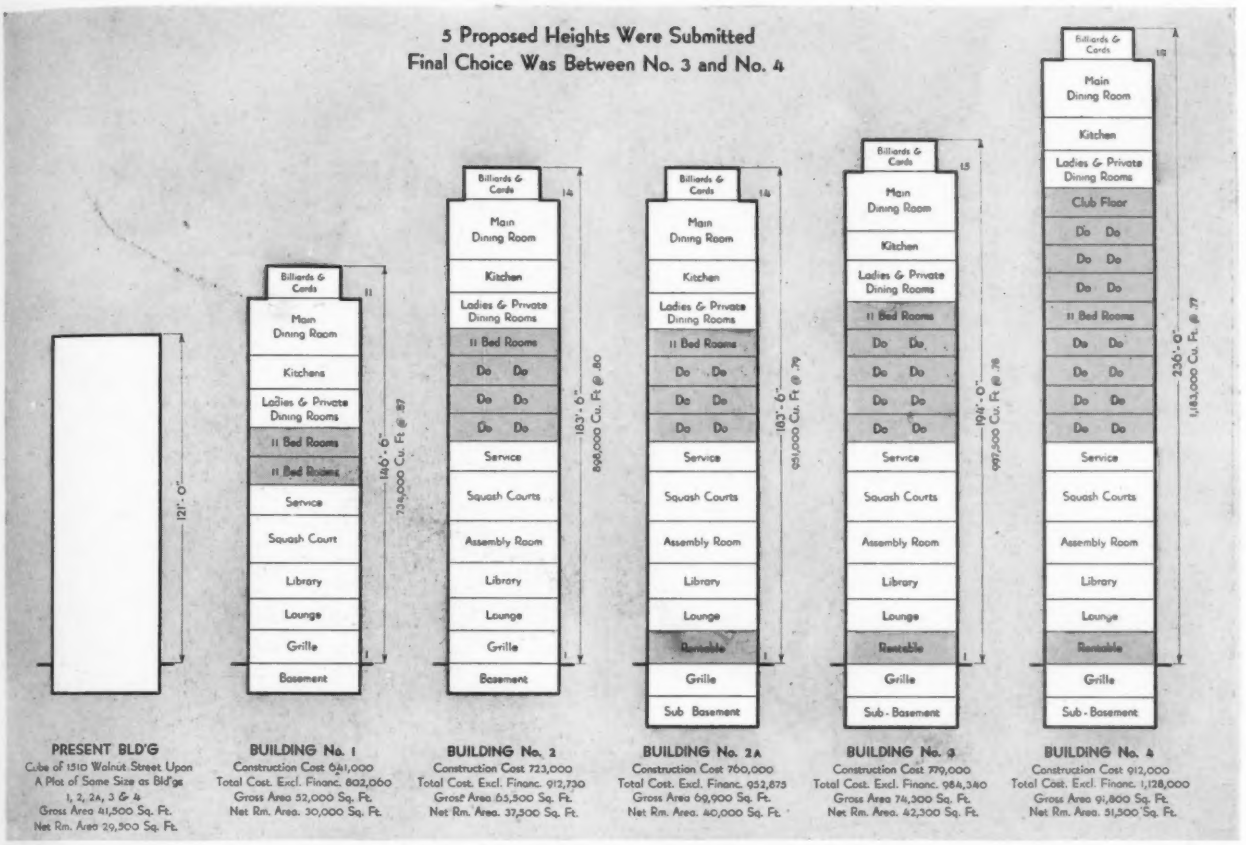
ACTIVITIES WERE PLOTTED in cross section to study the interrelationship of various activities, as an aid in determining the necessary variations in story heights, and to visualize activities in the building for the club members

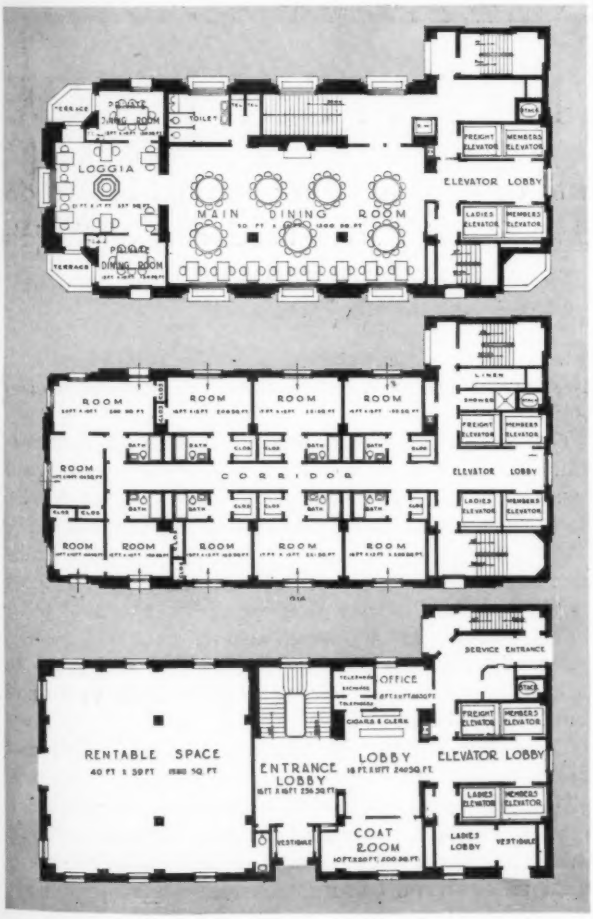
number of these rooms of which an 80 to 90 per cent occupancy could reasonably be expected.

3. It was agreed that facilities which yielded no substantial revenue should be reduced to the minimum compatible with the members' comfort and habits.
4. It was believed important to provide spaces for later expansion. It was thought that these spaces could be rented in the meantime as a source of additional revenue.
5. It was decided to eliminate facilities of a high annual maintenance cost. A fifty-foot swimming pool, at one time considered, would have required an addition of approximately 12 per cent to the cube of the building and an estimated annual cost of $14,000.
6. It was believed that too much space had been given to wash rooms in the clubs visited, and that smaller rooms conveniently placed would be adequate.
7. The location of a restaurant easily accessible from the street entrance was considered imperative.
8. A mechanical plant requiring the minimum operating personnel was considered desirable.
9. It was thought that the ladies' lounge and restaurant should be so planned as to include a separate entrance and an access to these rooms independent of the club circulation.
10. That the dining rooms could be successfully operated even though it would be necessary to locate them both above and below the kitchen.

While this program was accepted in general, a difference of opinion existed as to the amount of money that should be appropriated for the cost of the building, and the amount of money that should be allocated for annual maintenance. The opinion was held that the club could without difficulty increase its membership sufficiently to meet a substantial increase in yearly expenses, but that it would be preferable to have a natural growth rather than one stimulated by organized effort.

With this as a starting point the cubes, cost estimates,


5 Proposed Heights Were Submitted
Final Choice Was Between No. 3 and No. 4
PRESENT BLD'G
Cube of 1510 Walnut Street Upon A Plot of Same Size as Bld'gs 1, 2, 2A, 3 & 4
Gross Area 41,500 Sq. Ft.
Net Rm. Area 29,500 Sq. Ft.
BUILDING No. 1
Construction Cost 621,000
Total Cost. Excl. Financ. 802,060
Gross Area 52,000 Sq. Ft.
Net Rm. Area. 30,000 Sq. Ft.
BUILDING No. 2
Construction Cost 723,000
Total Cost. Excl. Financ. 912,730
Gross Area 63,500 Sq. Ft.
Net Rm. Area. 37,300 Sq. Ft.
BUILDING No. 2A
Construction Cost 760,000
Total Cost. Excl. Financ. 952,875
Gross Area 69,900 Sq. Ft.
Net Rm. Area. 40,000 Sq. Ft.
BUILDING No. 3
Construction Cost 779,000
Total Cost. Excl. Financ. 984,340
Gross Area 74,300 Sq. Ft.
Net Rm. Area. 42,300 Sq. Ft.
BUILDING No. 4
Construction Cost 912,000
Total Cost. Excl. Financ. 1,128,000
Gross Area 91,800 Sq. Ft.
Net Rm. Area. 51,500 Sq. Ft.
Billiards & Cards
Main Dining Room
Kitchen
Ladies & Private Dining Rooms
Club Floor
Do Do
11 Bed Rooms
Service
Squash Courts
Assembly Room
Library
Lounge
Rentable
Grille
Basement
Sub-Basement



HOW HIGH TO BUILD was a problem solved by studies of various building heights

and maintenance costs were prepared for five different buildings of different heights, as illustrated above. These studies were compared with the facilities of the then existing club building.

The six plans varied from a net room area in the old five-story building of 29,500 square feet, to a net room area in the largest building with nineteen stories of 51,500 square feet.

It was believed that the largest building would amply take care of any future growth of the club; therefore, the new club building would of necessity be somewhere between these two extremes.

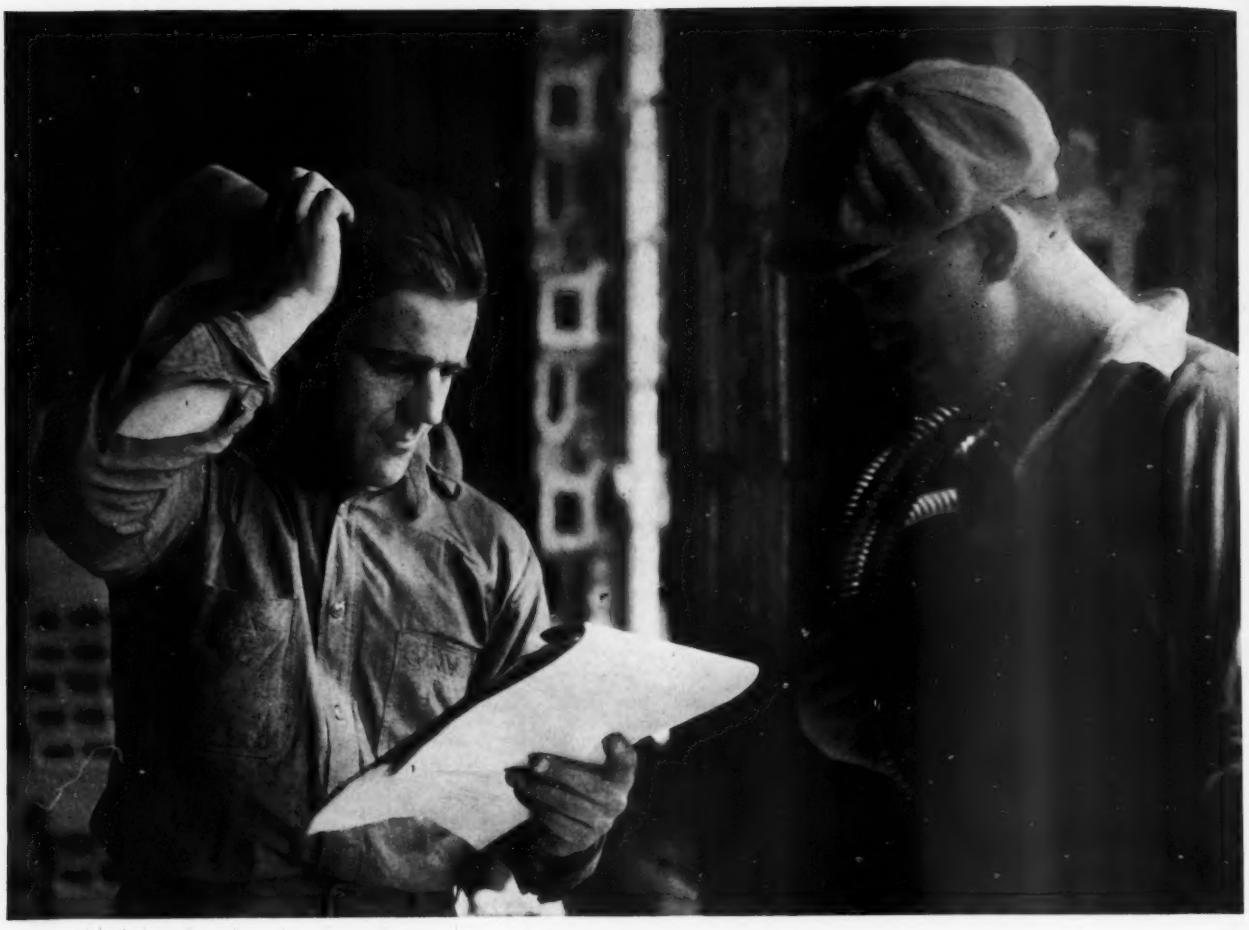
In order to present this matter to the membership for approval, a tentative program was made for a fourteen-story building with provision for three additional stories.

This program together with the financial plans was unanimously approved by the membership.

After a careful review of all the data available, the following program was made the basis for the design of the new building.

Two basements should be (*Continued on page* 92)

INTERIOR COLUMNS were located with reference to economy in planning interior arrangement. Floor plans at the left show the main floor, typical bedroom floor, and the main dining-room floor



PUT YOURSELF IN HIS PLACE

Make it easy for him to understand what you want him to do and how to do it, and there will be fewer headaches on the job

By EDWIN S. PARKER

Consultant on newspaper buildings
with S. P. Weston, Inc., New York

WERE you ever in a hurry to get a job going, and then have to stop everything to read directions? Speaking confidentially, did you really stop and read them, or did you just glance through them, assume you knew what was to be done anyway, and get the work going? Well, that is what the man on the job does too, only he doesn't read half as easily as you do.

True, the specifications are a vital part of a contract, and the man on the job *should read* them in detail. But the fact remains that he is hand-minded and not eye-minded, and he doesn't read them carefully. The only way out is to write something so simple that he can read while he runs and understand when he reads. He is always on the run and that is the only chance he gets to look at the "specs."

There are three things which happen to a specification. The estimator reads it; the foreman tries to read it; and, on occasion, everybody wrangles over it. So the subject can be divided easily into three parts.

First, it must be possible for the estimator to take off complete quantities and make a fair bid. He must know just what his work is to include and what is to be done by others and by which others.

Second, the man on the job should find it easy to locate the essentials *at once;* just what he is to do and how he is to do it.

Third, the specification must be discriminating and definite enough to be legally binding in case of a dispute.

The legal end is of very little interest to the workman, and it is useless to keep repeating it throughout the book. The standard A. I. A. documents are invaluable here. Ambiguities should be scrupulously avoided in the body

» » IF YOUR SPECIFICATIONS ARE DEFINITE AND EASY TO UNDERSTAND

The estimator can readily take off complete quantities and make a fair bid

The man on the job can locate information quickly and is more likely to follow directions

And the owner receives greater protection in case of a dispute

of the specification to prevent a dispute, on the "ounce of prevention" principle. Take as an example: "The forms for the floors shall be level . . . . etc." Well, just how level shall they be? An inch or two out is plainly too much, and to work to 1/16 is too close. On the job, the foreman will assure you that the plaster will easily cover the inch difference that is plainly visible . . . . the lathers take care of all that . . . . that's as close as we ever set them . . . . etc., etc. So unless you say that the forms shall be within some definite dimension of level, the floor gets poured. Then the plasterer says he can't do anything with a ceiling like that . . . . just look at the way it waves . . . . he'll do the best he can of course. And then you have to take the owners through and assure them most ceilings are like that nowadays, and it couldn't be helped anyway.

Say exactly what you want or don't say anything. If it is ambiguous you will take whatever the contractor chooses to give you, perhaps with much argument and no results. Tell him how much water he must use in his concrete and just how he is to measure his materials. Say beforehand what will be considered an equal—it is awkward and difficult to settle it later, and it has to be settled some time. And if you find that your wording is beginning to ramble—stop and think, for evidently you don't know exactly what you want done.

But don't specify at length things you can't possibly get or check. Don't specify a material that is not available—everything on the market is "equally good" to the average contractor. Don't specify such things as the chemical or physical properties of iron or steel. They are both so made that you will get the regular product anyway unless you pay a price. Such things increase the size of the book and make it harder to find the important items.

The ultimate aim of a specification, however, is to reach the man who actually does the work. There should be a clear grouping of items so that what is relevant only as preliminaries or as technical or legal, does not have to be read when looking for particular instructions. Keep things distinct, clear and make them brief, and remember that the man on the job works easier than he reads. Capitalize important items so he can find them. Say a thing once, clearly, and in its place.

I quote from a section on stone work which was picked at random from a typical specification. "The face shall be set on thoroughly soaked wooden wedges which shall not be removed until the building is cleaned and ready for pointing." A cook-book doesn't waste words like that. It is all wrong from the point of view of exposition. True, you can find what is wanted if you read it carefully, but a workman reads with difficulty and under confused conditions. The directions should be explicit. Say rather: "Set face on thoroughly soaked wooden wedges. Leave them in place until ready to point." This makes for brevity and clearness, and leaves no doubt as to what is expected of him. Elsewhere it should say that the building shall be cleaned before pointing, and what the workman actually does is to pull the wedges out as he points.

THIS instruction element is really the important thing. If everyone is told what to do and what to use so that there is no question there will be no legal problem to settle. Buildings are not built in law courts, and good faith is at the bottom of every transaction. When a wrong material gets in place or a piece is wrongly set, do we order it out? Very rarely, for there is always some qualifying circumstance. And besides, the delay in the job would cost everyone more than the item is usually worth. So we get our heads together and go through the agony of finding some way out.

Good faith is at the bottom of a job, with human variations of course. I defy anyone to tell what a plasterer is putting into his mortar box. If you go poking around a job they are apt to dislike you and do things to spite you behind your back. A lot of things are their business anyway, but they, fundamentally, want to know just what you yourself want done—that is at the bottom of it all. That is what a specification is for.

Let us examine the situation from another point of view. A set of men, highly trained to think and read, and who are constantly engaged in thinking and reading, plan a building. They must pass their ideas on to men who work with their hands and who read much less easily. Hence the vital instructions should be in short sentences, well grouped, and with special points emphasized. Legal points, which are always involved and lengthy, should be kept separate. Then when the plumber, for instance, is ordering valves, he can quickly find out if he can use his choice or must get a certain kind. And if he has to put a certain kind of trap in certain places, he discovers it before he has all his lines run.

Our highly developed schemes may be perfect, but if the man on the job doesn't grasp them, we have the heart-break of seeing the job botched. It is no use pointing to a secluded paragraph afterwards and proving that it is his fault. It should have been so plain that he couldn't have missed it. When he misses it—is it his fault or our own?

« « « "We Represent Every

BY HENRY C. COLLINS
Editor of the Bulletin of the Northern Section

California has perfected a state organization with a good income which can go before the state legislature and truthfully say, "We represent every architect in California"

WHEN the Northern California Chapter of the American Institute of Architects invited all certified architects of Northern California to a meeting to discuss the subject, "Support of the State Board of Architecture," the seed was cast for an activity within the profession which was to come to flower in the organization of the State Association of California Architects.

With an attendance of approximately one hundred architects, the meeting was held February 28, 1928, in San Francisco. Four of the members of the Northern District of the State Board of Architects were present at the meeting and presented the situation to the assembly. Albert J. Evers, then secretary of the board, pointed out that enforcement was not uniform over the entire state. He proposed that, to make the law equitable, enforcement should be uniformly applied in the smaller communities as well as in the large cities, and that this result be brought about by unanimous, organized support of the board by all certified architects in the state. Mr. Evers said, "The building industry and the public at large should place their influence and support behind the board, but it is hoping for too much unless the architects themselves make the primary moves."

Discussion from the floor showed that a spirited feeling of enthusiasm had been aroused. This manifestation of unity and conviction of thought was brought to a climax by the passing of a resolution calling for the formation of a temporary association of certified architects in Northern California to promote the enforcement of the Act, and for the appointment, by the President of the Northern California Chapter, of a committee to arrange for such organization and for policies and methods; and for the president to advise the Southern California Chapter, A. I. A., of this action, suggesting some similar activity in the southern part of the state.

An organization committee was appointed. Selecting for the organization the name, The State Association of California Architects, and deciding that all certified architects of California would be considered to be members, the committee set about outlining general purposes and objectives. The organization committee issued a circular letter addressed to all certified architects in the Northern District. Outlining the work to date and advising of the drafting of a constitution and by-laws, this letter stated that a meeting would be called to vote on such documents; and that, prior to this meeting, a conference would be held with architects in the Southern district.

A general correspondence had been carried on with the secretary of the Southern District Board, and with Myron Hunt, then regional director of The American Institute of Architects; but an opportunity to present the matter to the directors of the Southern California Chapter did not immediately occur. As a result the organization committee in the North, spurred on by the impetus given it by the enthusiasm manifested on every side, deemed it advisable to call a general organization meeting before the Southern California Architects had been more than barely advised of the movement.

Just at this point, very fortunately, the annual joint meeting of the State Board of Architecture was held in Los Angeles April 10 and 11, 1928. The Northern District Board members were fully informed of the work which had been done on the Association because the secretary, as an ex-officio member of the organization committee, had participated in all of its deliberations. The entire membership of the Northern District Board attended the Los Angeles meeting and, after considerable discussion, the Southern Board agreed to support a state-wide movement as represented by the proposed State Association.

The second week following the joint state board meeting, the secretary and the regional director, who was also a member of the state board, met with the directors of the Southern California Chapter, A. I. A. Again, after much discussion, it was agreed that while the directors were not unanimously in favor, they were at least convinced of the advisability of a state organization under the auspices of and with the support of the Institute chapters.

THE Southern California Chapter called a mass meeting of all certified architects May 8, 1928, and invited a delegation from the North to help present the situation. The outcome of this meeting, attended by over 200 architects, was the passing of a resolution calling upon the president of the Southern California Chapter to appoint an organization committee to work with the similar committee in the North. The following day the Northern delegation met with a group from the South. Many of the details of organization worked out at this meeting were those finally adopted. It is interesting to note that at this meeting it was decided not to prosecute violations of the Certification Act, but rather to prepare for revision of the Act at the earliest possible date.

There was then undertaken the huge task of effecting an organization embracing the some 1200 architects scattered from one end to the other of the nation's second largest state. The state was divided into districts, and one architect in each district was asked to call the local

Architect in California"

HOW THE ASSOCIATION WAS ORGANIZED

ALL certified architects of northern California were invited to a meeting held by the Northern California Chapter, A.I.A., to discuss enforcement of the state Certification Act.

It became obvious that a state association was necessary to effectively deal with matters such as this. Decision was made to form the State Association of California Architects with every certified architect in California a member.

THE Southern California Chapter, A.I.A., was advised of this action, and called a similar meeting.

To bring all 1,200 architects in the state into the organization, the state was divided into districts. One architect in each district was appointed to call the local men together to elect a district advisor.

Upon certification, every architect automatically becomes a member unless, by written request, he excludes himself from the association. He is advised of his membership and the district advisor gets in touch with him and outlines the aims of the association.

There are two classes of members. Active members pay annual dues of $3; associate members are those who do not contribute to the support of the association.

•

To provide funds, the association made arrangements with a building report service to furnish building project news in return for a commission. Last year, $10,000 was secured from this source.

men together to acquaint them with the developments to date and to elect a district advisor. At the same time the organization committees were working on the framing of the constitution and by-laws.

The first meetings of the two sections of the newly formed Advisory Council were held in June, 1928, at which meetings the most important item of business was the selection by each council of two architects at large to serve on the Executive Board. The chapters of the Institute and the State Board of Architecture having named their representatives to the Executive Board, the two sections of the board held the first joint meeting at Santa Maria, a point midway between Los Angeles and San Francisco, July 17, 18 and 19, 1928. At this meeting officers were chosen to serve until the convention of 1929; and discussion revolved about the framing of the objectives of the organization and details of the constitution.

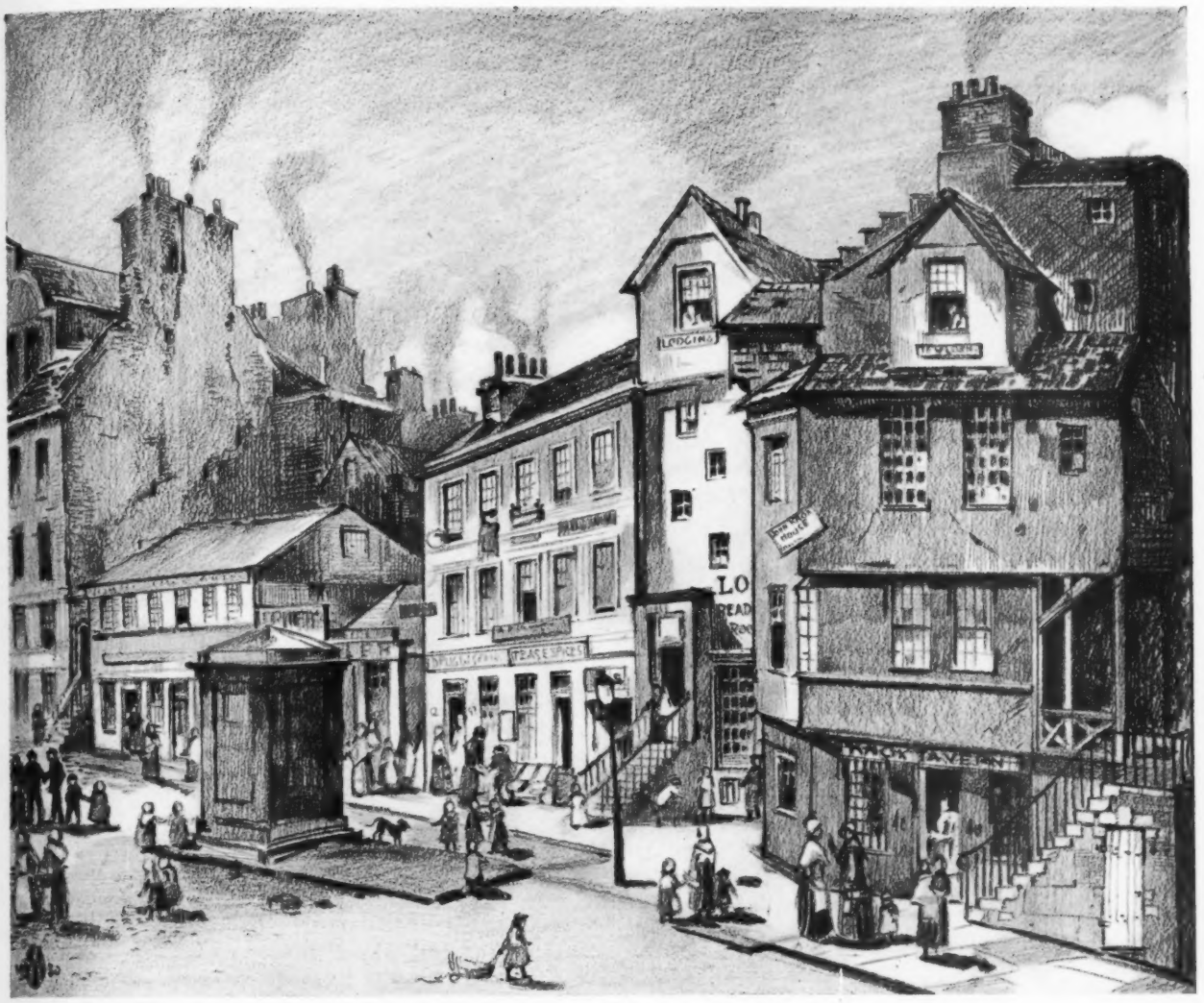
AT this point it might be well to introduce a brief statement of the purposes and organization as follows:

"The State Association of California Architects is a voluntary and non-profit organization comprising for its membership every person who, by authority of the state law regulating the practice of architecture, holds a certificate as an Architect in the State of California. The objects of The State Association of California Architects, as set forth in its constitution, are:

"To advance the science and art of architecture; to insure to the public efficient architectural service; to encourage architectural education; to maintain the honor and dignity of the profession of architecture; to enlighten the public in relation to the province of architecture in the body politic; to advocate proper legislation and to oppose improper legislation affecting architectural practice; to support the State Board of Architecture; to cooperate with other professional associations, and to cultivate social intercourse among its members.

"The highest authority of the organization rests in a democratic gathering of architects in annual convention held in October. In the interim between conventions full power and authority, within limitations fixed by the constitution and by-laws, is vested in an Executive Board. For administrative purposes the Association is divided into the Northern and Southern Sections with headquarters at San Francisco and Los Angeles. The Executive Board of each section is composed as follows: Two members named from its membership by the district board of the State Board of Architectural Examiners; two members named by the local chapter, or chapters, of The American Institute of Architects; and four architects at large elected by the Advisory Council of the Association. The Regional Director of The American Institute of Architects for its ninth district is, ex-officio, a member of the Executive Board of The State Association of California Architects.

"The two sections have been further divided—usually by counties—into districts (*Continued on page* 80)



JOHN KNOX HOUSE, EDINBURGH
crayon drawing by
GEORGE WITHERSPOON
of Theodore Visscher & James Burley
architects, New York

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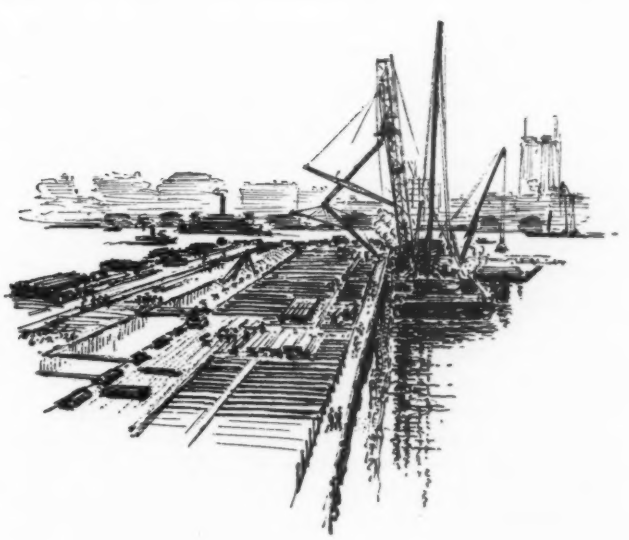
A HUDSON RIVER DOCK
pen and ink sketch by
H. L. McCALL
of New York



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RUINS
lithograph by
LOUIS PIROLA
of Chicago

SKETCHES

. . As It Looks

Why Conceal True Beauty?

THE bridge across the Hudson River from Manhattan Island to New Jersey nears completion. Strong, stalwart and beautiful, the massive steel towers rise skyward. They are true, honest, sincere. They need no added virtues to make them satisfy the eye. The original design calls for these towers to be encased in stone. Neither beauty nor utility would be better served by covering the massive steel columns. Why do it? The Port Authority has stated that final decision has been reserved. Some forty persons have protested the concealing of the supporting structural elements to one that argues for it. Truth is beauty. Why conceal it?

Unification Plan Progresses

OF vital importance to the architectural profession was the meeting of the Unification Committee, recently held in Indianapolis for the purpose of developing a plan whereby the American Institute of Architects and the various state societies would be combined in an harmonious whole to work unitedly for the good of the profession. The committee was appointed at the San Antonio convention of the Institute, Edwin Bergstrom of Los Angeles being chairman. A working plan was developed which, however, is not yet in final shape for publication. It is expected that the plan will be presented to the Board of Directors this fall and finally voted upon at the next convention of the Institute, to be held this coming spring.

Let's Face the Facts

LUGUBRIOUS indeed is the picture painted by James Dalton in his article in this issue, "Let's Face the Facts and Go Back To Work." But it is a picture that needs to be clearly understood. It is a picture that many far-seeing architects will feel strikes close to home. For with lessened construction, with lessened business prosperity in general, the architectural profession need look for no easy plums to pick. What business there may be—and there always will be plenty, no matter how bad conditions may be—will go to the men who buckle down to hard work with a full realization of what confronts them. If architects are content to wait for their share of business to be handed over on a silver platter, they will sit down to many an empty dinner table. But if they make sure that the public understands just how valuable an architect is, just how great is this value in cold, hard dollars and cents, then it is reasonable to expect that they will handle a larger percentage of the building business than they ever did before. And this larger percentage can more than take care of the decrease in the total number of building operations. To get this larger percentage needs merchandising ability of no mean order, carefully planned cooperative advertising campaigns, and aggressive salesmanship.

Army Buys Russian Matches

WITH our own American industries needing business, it seems farcical to read that the United States Army, requiring matches, called for bids and accepted that from Russian manufacturers. This bid was 25% below that of the lowest American bid. Under the law, according to Major Barry of the Quartermaster's Department, the Army must accept the lowest bid.

If the Public Only Knew

IF the public had a better understanding of the functions of the architect, it is probable that the attitude of Government officials would be far different from what it is today. Since the public generally believes that the function of an architect is to make drawings, it sees no reason why those in government employ cannot make just as good drawings. As a matter of fact government employees can make just as good drawings and if these were the sole function of an architect, little would remain to be said on the question.

A Trade-mark Idea

A CERTAIN architect, well, Harold Zook, Chicago, Ill., to be exact, has adopted a trade-mark. It is a spider web. Just why a spider web he fails to explain. But it's the idea that counts. On every job he finds a place to work in his insignia—in the pane of a leaded window, painted in the corner of a wall or as other opportunity may offer. It is a fortunate insignia, for should he fail to place his stamp of authorship on a building, probably a spider would find its own place to spin a web.

Material Advertising

CONSIDERABLE harm is being done to the development of public good taste by the use in building material advertisements of poorly designed and even ugly buildings. Realization of this harm, which reacts to the detriment of the advertiser, caused the Indiana Society of Architects recently to pass the following resolution:

"That the Indiana Society of Architects questions the value of the advertising of building materials in newspapers, magazines, or other mediums that include with the advertisement illustrations and descriptions of poorly designed work not executed by architects. In the opinion of the Society the publication of stock plans and illustrations of poorly designed buildings in connection with the advertising of worthy building materials, leaves a false impression in the minds of the public as to the quality of the materials, is misleading as to what constitutes good design, and should be discontinued."

to the Editors . .

Washington Fees Raised

ARCHITECTS' fees are not high enough to cover production cost and to show a profit commensurate with the skill and experience necessary to design and plan a thoroughly efficient building. It is consequently of considerable interest to note that the Washington State Chapter, A. I. A., has adopted a new and higher schedule of charges. Their new fee for commercial, educational and similar buildings is from six to seven per cent; on churches, collegiate buildings, etc., seven to eight per cent; on residences, alterations, store fronts, interiors, etc., ten to fifteen per cent. The new schedule states that two-thirds of the commission represents production cost, and the remaining one-third professional fee.

Called "Fuller Brush Man"

ONE New York architect is called by his associates, "The Fuller Brush Man." Why? Because he has developed a penchant for ringing doorbells. Recently he located three schoolhouse jobs in one day, each running well over one million dollars—just because he doggedly went out ringing doorbells. And consequently, his firm is in at the inception of the projects instead of being informed after the usual rush of competition starts. That is the easiest sort of selling, finding the prospect in time to help him make up his mind.

The Oldest A.I.A. Member

THE distinction of being the oldest living member of the American Institute of Architects is held by George Keller of Hartford, Connecticut. In 1869 he became an Associate member and was made a Fellow of the Institute in 1886. If memory is not at fault he is eighty-eight years young, and hale and hearty. Among his architectural monuments is the war memorial gate at the entrance to the State Capitol grounds at Hartford, Connecticut. It was erected soon after the close of the Civil War and is an interesting monument of its time with its towers and frieze of soldiers in the uniform then in vogue. Many persons have passed through the gateway. Almost as many vogues in architecture and building have passed before the eyes of its designer.

Congratulations Dr. Butler!

A DEGREE of Doctor of Science has been conferred on Charles Butler of New York City by Rensselaer Polytechnic Institute. Ordinarily this would not be news for honorary degrees are often conferred on deserving architects. But, when a school primarily recognized as an engineering school confers a degree on an architect. and it happens in New York State too, it becomes news. Congratulations, Dr. Butler!

Quotes Or No Quotes

EDITORS have many perplexing questions placed before them. Here's one. When an inscription reading, for instance, Ben Franklin said "So and so," is placed on a building, is it essential that quotation marks be used? Apparently the question arose due to letter spacing or decorative consideration of the punctuation marks. Do inscribers, like poets, have special license? Is the omission of the quotation marks in such event justified by precedent? What would you say?

Many Men, Little Work

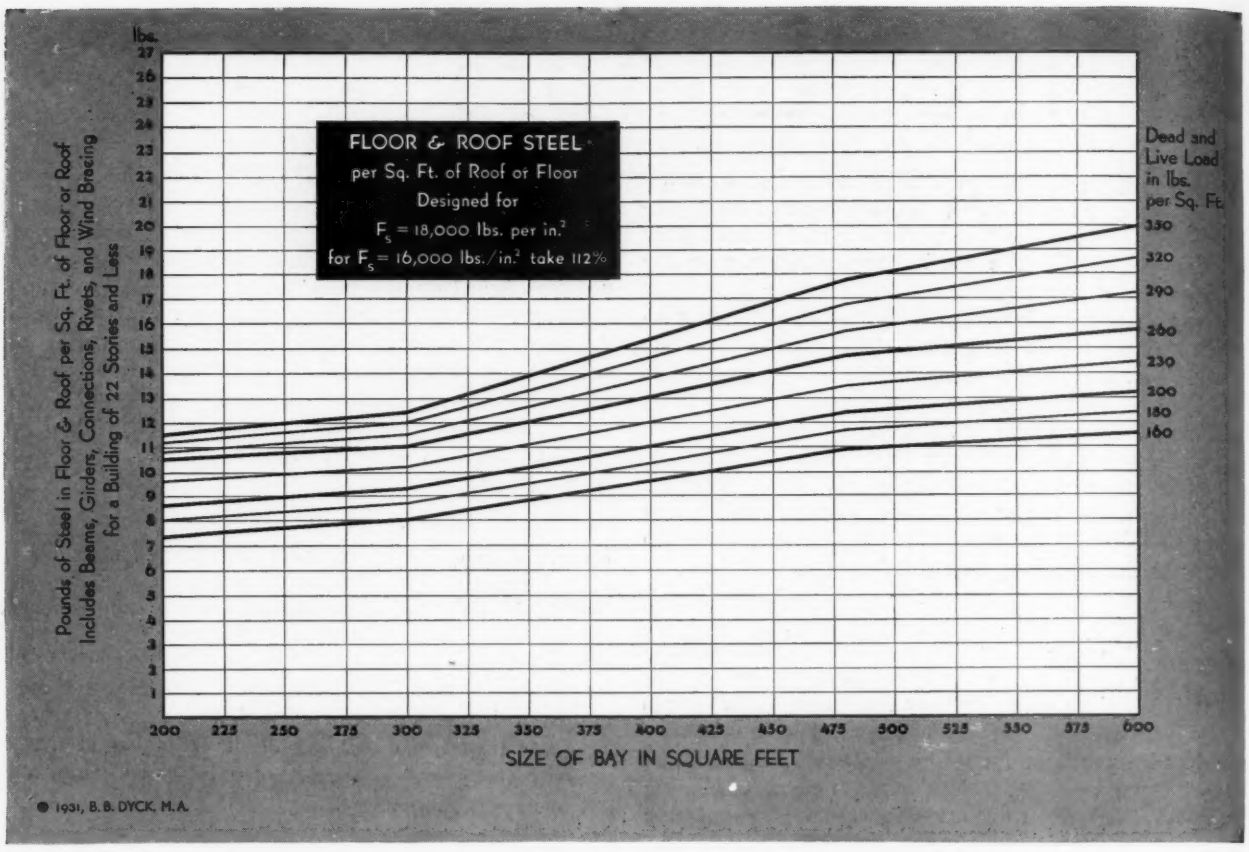
TAXPAYERS in Hartsdale, N. Y. voted on two propositions, one for the purchase of a $13,000 fire truck and the other to pay six men to operate the truck. The proposition to buy the truck lost. The proposition to engage six men to operate it won. The town found itself with six truckmen and no truck. This condition maintains in many lines of endeavor. The simile can be given wide and obvious application today.

Maybe Wall Paper Helps

A STORY is going the rounds of two men who purchased houses that had been built on speculation in the same development. They met several years after their purchases and were comparing notes. One complained about the way his house had gone to pieces and thought that the other's house had stood up better. The second man explained it by calling attention to the fact that the walls of his house were papered when bought and that the walls of the other house were only painted.

Architects In Industry

BEAUTY is an intangible quality which, because of its very intangibility, is a thing difficult to secure, particularly in a commercial product. Such products are only too often the output of a designer who, though often thoroughly understanding the material he uses, yet has not the viewpoint of a trained artist. And so it is refreshing to see advertisers in the building field come more and more to a greater appreciation of the architect as a designer of their products. Among these is the Harrington and King Perforating Company, which recently conducted a competition for grille designs. As is usual with sketches submitted by those skilled in architectural design, the results were decidedly pleasing. Beauty has a large cash value, and it is to be hoped that more and more manufacturers will come to the architect for expert advice and counsel in order that the full measure of beauty possible may be obtained.


FLOOR & ROOF STEEL
per Sq. Ft. of Roof or Floor
Designed for
F_s = 18,000 lbs. per in.²
for F_s = 16,000 lbs./in.² take 112%
Pounds of Steel in Floor & Roof per Sq. Ft. of Floor or Roof
Includes Beams, Girders, Connections, Rivets, and Wind Bracing
for a Building of 22 Stories and Less
lbs.
Dead and Live Load in lbs. per Sq. Ft.
330
320
290
260
230
200
180
160
SIZE OF BAY IN SQUARE FEET
© 1931, B. B. DYCK, M.A.

BEAMS—First, determine number of square feet in average bay and locate at bottom of chart. Second, follow vertical line to where it crosses heavy lines. Third, knowing the design load, locate this load at right side of chart. Fourth, follow heavy line to its intersection with vertical line found in second step. Fifth, follow light horizontal line from this intersection to left of chart. Sixth, multiply this figure by number of square feet in typical floor, multiply result by number of column-supported floors. This final figure is weight of steel in pounds for floor construction.

HOW TO FIGURE Structural Steel

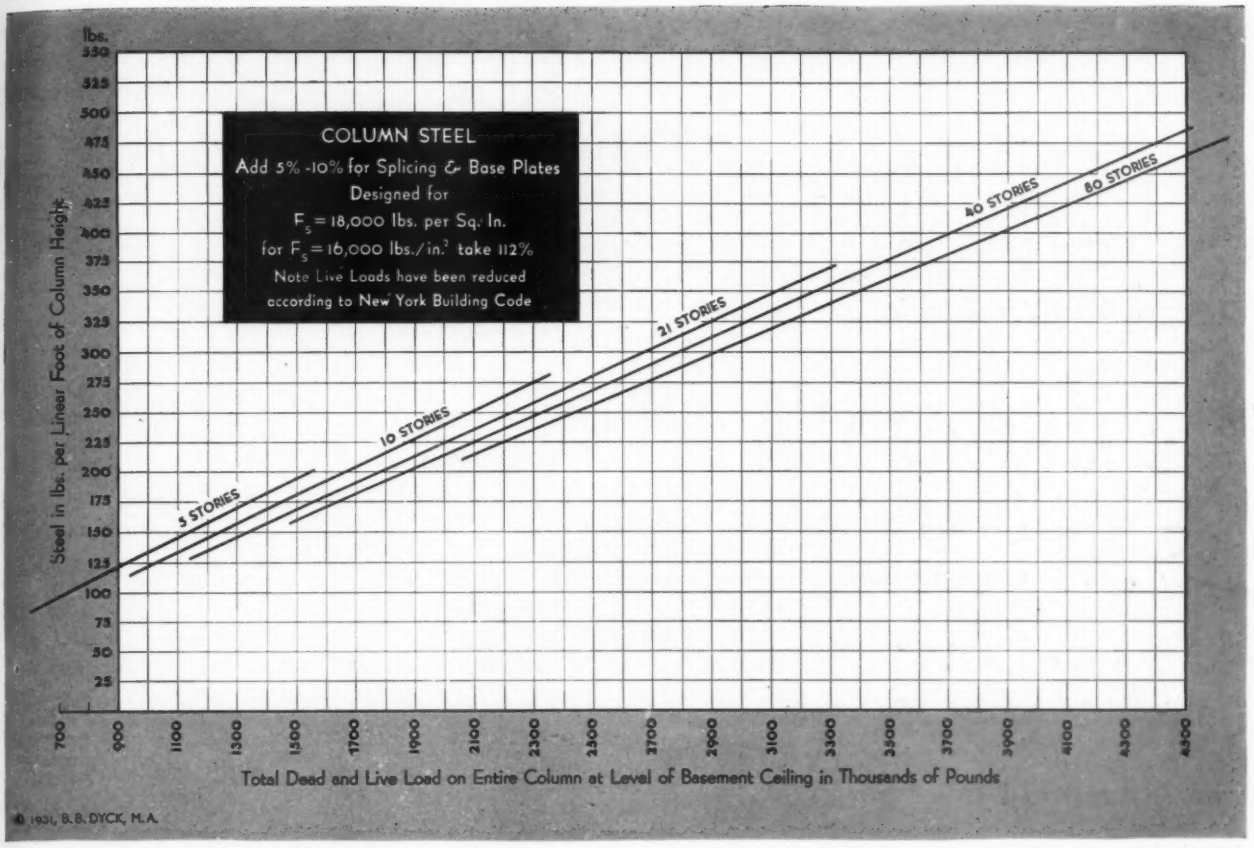
Mr. Dyck is an engineer who, to speed up his own estimates, developed this quick and easy method of figuring the amount of structural steel in apartment, hotel, office, and loft buildings of the standard commercial type.

STRUCTURAL steel is one of the major items of building cost and requires for its detail quantity estimate an unproportionally large amount of time. The tonnage of steel *in a building with a given ground area* varies with the loads carried, spans and height. All other conditions being the same, the shape of the building has a negligible effect on the weight of steel required per square foot of floor and can be disregarded in all cases where relation of width to length does not exceed 1:3.

An ideal short-cut method of estimating steel for a commercial structure ought to have the following features: a scientific basis, simplicity in use, economy of time.

With the case in hand a scientific basis can be established: first, by a realization of cause and effect; and second, by the application of the principles of applied science to establish the continuity in the relationship of these two phenomena.

In seeking the cause, we have to discard classes of buildings as inadequate. As far as steel is concerned, any class of building is designed to carry loads. If we assume that four classes of buildings—apartment, office, loft and warehouse—cover the total range in loads, we still have a range in loads within each of these classes, as building codes of various communities will show. Loads, dead and live, thus, are the prime cause. The effect is a certain amount of steel for a given column spacing, as far as floor or roof steel is concerned. Ex-



COLUMNS—First, multiply square feet in average bay by design load. Second, multiply result by number of floors, which gives total load at level of basement ceiling; locate corresponding figure at bottom of chart. Third, follow vertical line from this figure to heavy line indicating number of stories. Fourth, follow light horizontal line left, where will be found pounds of steel per linear foot of column height. Five, multiply this figure by height of building, also by number of columns. This final figure gives total steel in all columns.

Costs in 30 minutes

By BERNARD B. DYCK, M.A.

pressed in other words, each given design load and column spacing will effect a certain amount of floor steel per square foot of floor area. The latter quantity, thus, is dependent on two independent variables, the design load and bay size. Using the language of mathematics, we would say that amount of steel per square foot of floor is a function of design load and bay size. The accompanying floor chart is the expression of this relationship. It shows that floor steel increases with the increase of either design load or column spacing.

With column steel the case is not so simple. Height enters here as another factor, both story height and number of stories. Column steel per square foot of floor, thus, is a function of bay size, design load, story height and number of stories. The other three variables being constant, column steel per square foot of floor increases with the increase in the number of stories, increases with the increase in story height, increases with the increase in the design load, and remains constant with the increase in bay size. The latter holds true, however, only as long as base plates are not included. In other words, the amount of steel here is a function of four variables.

To leave the four variables in the picture and still get a chart of maximum utility, it was found necessary to change the unit quantity to be found from "column steel in pounds per square foot of floor" to "column steel in pounds per lin. foot of column." This unit quantity is independent of story height within the usual range and, the other variables being constant, increases with the increase in bay size and design load, but decreases with the increase in number (*Continued on page* 86)

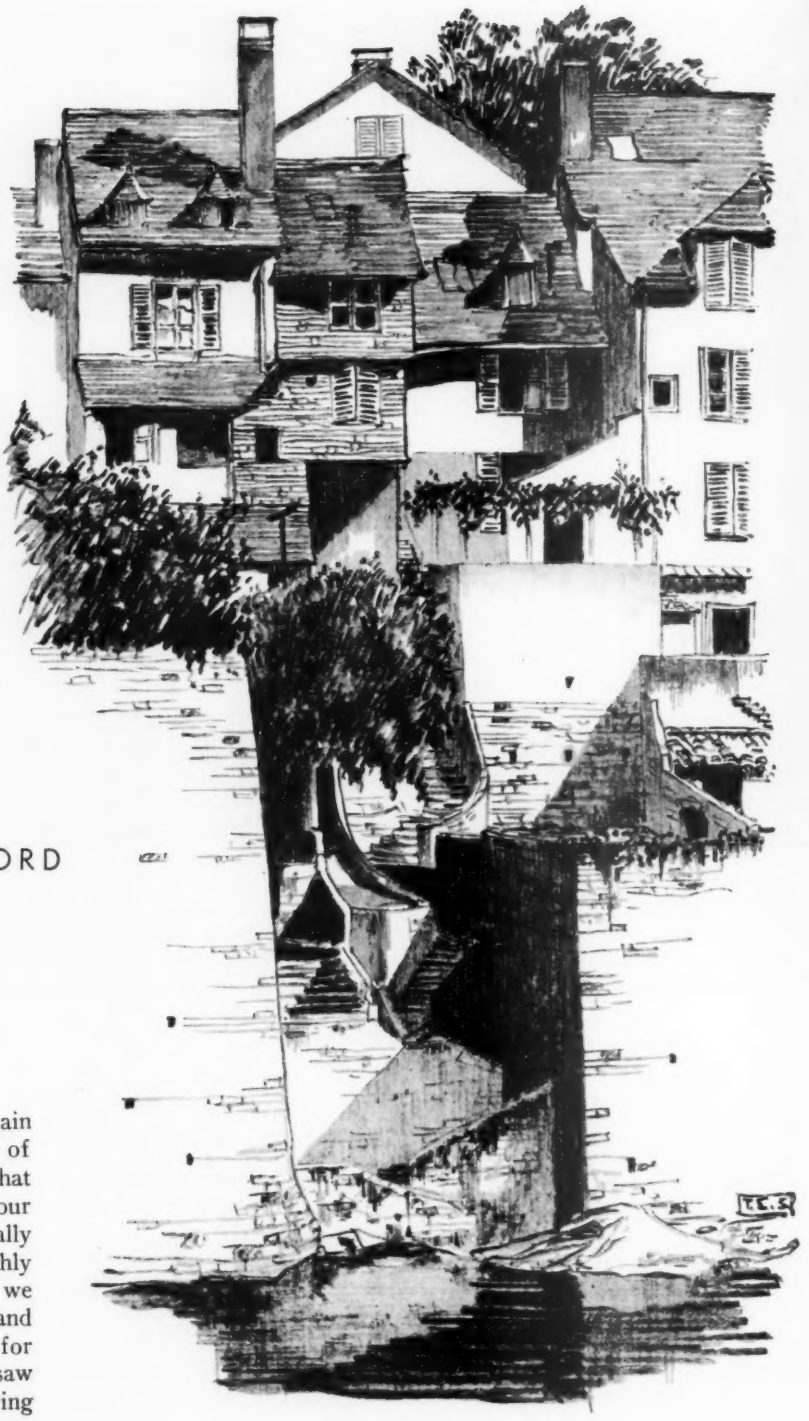
« » » In the Foothills of the Pyrenees

OLORON SAINTE MARIE

By

TRENT ELWOOD SANFORD

Architect, Evanston, Illinois



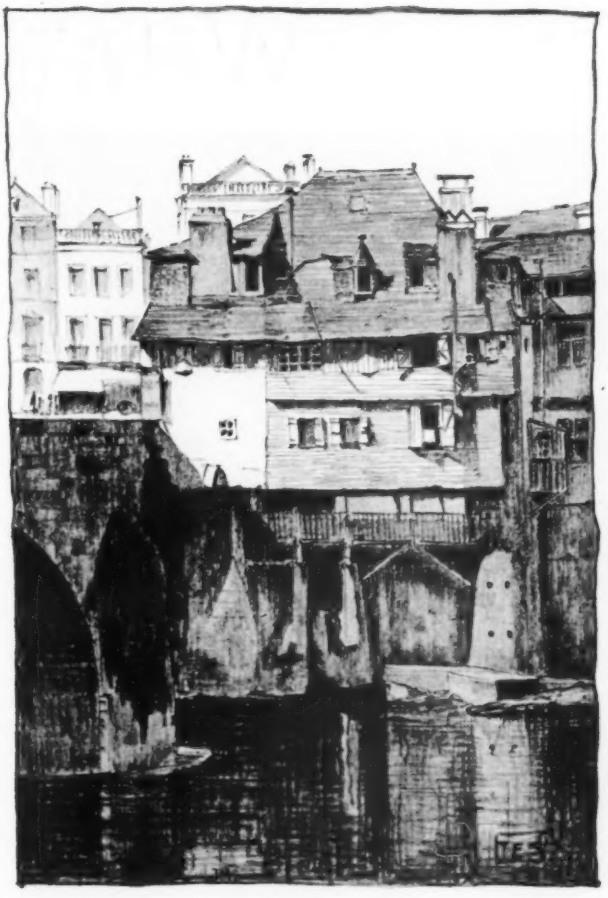
THERE are certain monuments of architecture, certain cities of architectural and historical importance that we all include, as a matter of course, in our travels through Europe. In some, especially if we have a tendency to too thoroughly visualize, we are disappointed; in most we are not. In any event, those places and those monuments we take more or less for granted. We knew them before we saw them, and we know them better for having seen them, and we are not sorry—we even want to see them again.

But the places that stand out in our memories—memories that we do not share with everyone who has seen Paris and London and Rome—are those places and those things that are unheralded; some obscure bit in an unknown town; some little village tucked away out of reach of any but the most zealous searcher or the least impatient with branch line railroads. Vast cathedrals and history-making palaces satisfy in us an urge, but in doing so often leave us overwhelmed, and then is the time to indulge in simpler things for the sheer enjoyment we get from them.

So when your brain is fagged, when your senses become numbed with the beauty of Gothic cathedrals and your mind a jumble of Renaissance chateaux, here is a suggestion.

In the foothills of the Pyrenees, not far away on a branch line railroad from Pau, but in decided contrast to that so-called Paris of the south, is a little village called Oloron-Ste.-Marie. It was once two villages divided by the Gave d'Aspe which unites with the Gave d'Ossau to form the Gave d'Oloron, but when Henri IV became king of France and the crowns of Bearn and of France were united, so too, were the villages of Oloron and Ste.-Marie. Once a feudal stronghold, it

ELEVENTH CENTURY Church of Sainte Marie, once the cathedral of the diocese. Of prime interest is the richly sculptured Romanesque portal



BALCONIES afford delightful places to sit and gaze at the water—but are popularly used to hang out laundry. Old house, Place Thiers

then settled down to the peaceful existence which it enjoys today beside the swift-moving streams upon which it is built.

On the sides of these streams balconied houses grow out of the rock, piled up one above another, winding steps leading from their doors through openings in the walls below down to the water's edge. Between them, along the narrow streets, huge black oxen vie with bonnetted women carrying large baskets heaped high with vegetables for possession of the right of way. Men wearing berets, baggy trousers, and long dusters hold aloft long sticks with which to guide their patient teams, who, stepping slowly and heavily along, heads down, turn at a light touch of that long stick.

It was market day when we were there, and the Place Gambetta was crowded with stalls of fruit and vegetables, and all sorts of clothing as well. All of the nearby streets were lined with carts; where the horses were, I can't imagine—perhaps the stout women tending their stands had pulled the carts to town themselves.

Typical of old French towns, the streets wind and twist, and along them, houses of one or two stories on the street drop down five or six on the water front. Many have thick walls of stone rising abruptly from the stream, with upper stories of stucco or slate. The roofs are steep and are of tile or slate, thoroughly punctured with slate-covered dormers, in character more like the houses of Normandy or Brittany than those of Provence to which they are nearer in miles though not in spirit. Balconies clinging to the sides of the houses afford delightful places for the dwellers to sit and gaze down at the water, but are more popularly used for hanging out laundry.

A PICNIC lunch in some secluded spot along one of the streams appealed to us as being more fun as well as cheaper than lunch at the rather uninviting looking hotel. So, after a morning of wandering, photographing and sketching, we hastened back to the market where huge melons sold for a song but grew heavy while being transported to a picnic ground. Tomatoes, a long loaf of bread, camembert cheese and gaufrettes added to the load (the weight of the gaufrettes the least), and a litre of wine at a cost of three francs did its bit to bring out the perspiration which a hot and bright September day had started.

A zigzagging path leading down behind old houses to the stream where the banks were not so steep opened out eventually into a grove of trees and a stone wall along the water. Old deserted stone mills across the stream framed the curious old domed church of Sainte Croix, rising above the houses on the summit beyond. The huge trees afforded shade, the stone wall a seat, and slices of melon soon (*Continued on page* 96)

WHAT ARCHITECTS

Borhek Advocates National Advertising Campaign by Architects

First Industry-Owned Mortgage Company

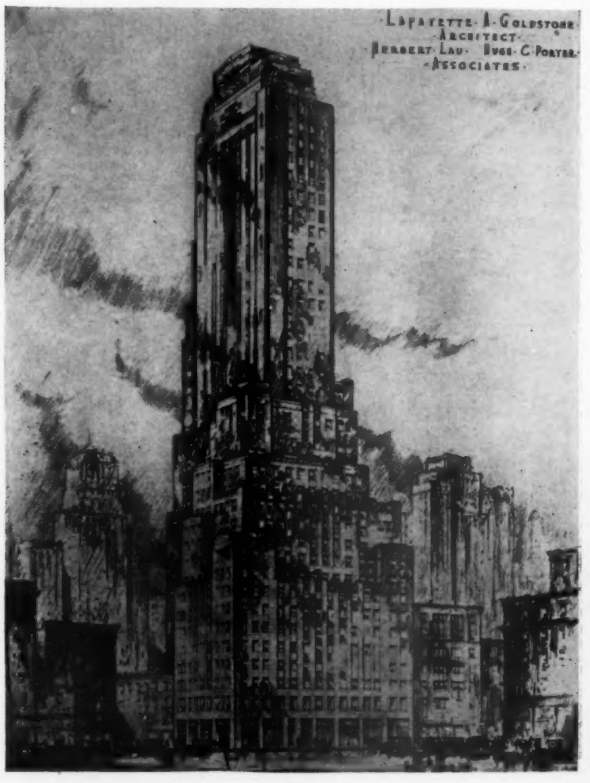
West Texas A. I. A. Radio Programs

ALL SIDES AT ONCE. An imaginative study rendered with Wolff's crayon by T. de Postels Studio, showing possibilities of presenting all sides of a structure in the one drawing

THE National Homes Finance Corporation has been organized by the Associated Leaders of Lumber & Fuel Dealers, and is stated to be the first industry-owned mortgage company. The first stockholders' meeting was planned to be held July 14 in Chicago. Alton J. Hager, Hager & Cove Lumber Co., Lansing, Mich., was made temporary chairman of the incorporation committee, and nearly two million dollars have already been subscribed.

A SERIES of radio programs has been started by the building industry of San Antonio under the leadership of the West Texas Chapter, A. I. A. Thirty minutes will be used each week for three months. The programs will consist of music with a five minute talk by an architect, these talks to form a continued story about the importance of good design, the functions of an architect, financing, etc.

A NATIONAL exhibition of the allied arts of design is planned for Washington during the Institute convention in 1932, according to J. Monroe Hewlett, chairman of the Committee on Allied Arts of the A.I.A. The National Sculpture Society and the National Society of Mural Painters are cooperating with the Institute in arranging for this event. It is intended "to bring to the national consciousness the importance of allied arts in our architectural development."



ANOTHER SKYSCRAPER for downtown New York is now under construction at 19 Rector Street. Lafayette A. Goldstone, architect; Herbert Lau and Hugh C. Porter, associates

NO speed limit on New York elevators is provided for in the new building code, and several buildings will shortly step up their rate from 700 feet per minute to 1,200 feet per minute. The new code also permits the operation of two elevators in one shaft.

ARE TALKING ABOUT

Washington A. I. A. Wants Government Out of Architectural Business

No Speed Limit on New York Elevators

First Arc Welded Steel House

WHAT is believed to be the first house of complete arc welded steel construction built in the United States was recently started in the Shaker Heights district of Cleveland, Ohio. Three inch light weight standard Carnegie channels and six inch light weight standard Carnegie beams are the principal shapes employed, all steel being cut to size before delivery to the job. It is expected that the entire arc welded steel framework will be erected in 2½ working days. George Howard Burrows, the architect, states that the house will cost about 40 cents per cubic foot, and that the complete cost will be about $72 more than the usual type of wood structure.

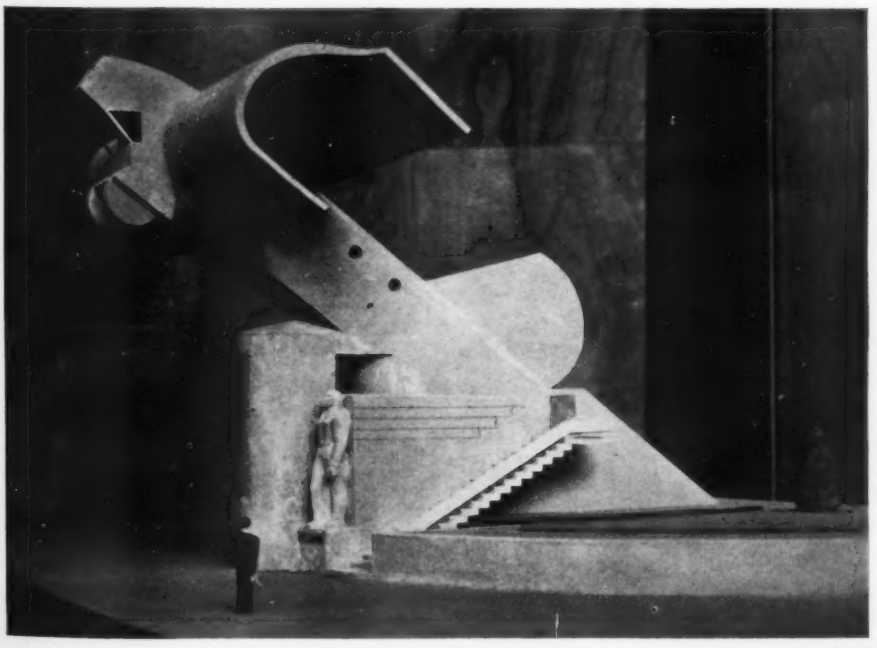
ALL members of the Associated Metal Lath Manufacturers have approved the certification plan of the Bureau of Standards. Under this plan, any public official, architect, building owner or contractor who desires uniformity of bidding and the use of high quality products requests manufacturers to state in their bids that they are willing to certify that their products will conform to the Federal Master Specifications governing metal bases for plaster and stucco. The successful bidder tags materials shipped for the specified contract, indicating that they are made in accordance with the Federal Master Specifications.

FREDERICK HEATH GEORGE GOVE AND HERBERT A. BELL
Announce
The consummation of Twenty Years in the
practice of Architecture.
With deep thanks to the more than three hundred Clients
of the five hundred buildings we have designed
in that period:
To the more than one hundred Draughtsmen, Engineers
and Stenographers who have assisted us:
And to the many Contractors and Material Men
who have executed our projects
1701 PUGET SOUND BANK BUILDING
TACOMA WASHINGTON
May twenty ninth 1931

TWENTIETH ANNIVERSARY card form mailed out by progressive firm of architects in Tacoma, Wash.

SINCE only a small proportion of the building public now employs architects, a national advertising campaign should be instituted to inform the public and create a demand for adequate architectural service, is an opinion expressed by Roland E. Borhek, president of the Washington State Chapter, A. I. A. He said that similar work was being done for other professions and should be done for the architect.

"THIS Chapter is strongly in favor of any action being taken to get the Government out of architectural practice," is a statement in a report of the Institute Affairs Committee of the Washington State Chapter, A. I. A. (*Continued on page* 102)



BONNEY

REINFORCED CONCRETE. Model of monument to honor the memory of the French transatlantic flyers, Coste and Bellonte. Designed by the twin sculptors, Jan and Joel Martel of Paris

Is architect liable for DEFECTIVE Foundations?

By GEORGE F. KAISER, LL.B.

● WHAT HE DID. A. B. Stemer, an architect, prepared plans and specifications and superintended the construction of a hotel. On completion there was some $8,000 due him. When the owner refused to pay, Stemer sued. The owner put in a counterclaim for damages alleged to have been sustained by reason of "faulty design, defective plans and specifications and want of care and skill in the erection and completion of the building." Stemer, in turn, denied the owner's claim and pushed his suit on to trial, even when advised the claim of the owner was predicated on a charge that one of the walls was so badly cracked as to depreciate the value of the building.

WHY HE DID IT: The architect disclaimed liability and insisted that the cracking of the wall was due to defects in the foundations, thinking he was not responsible for such defects.

WHY HE SHOULDN'T HAVE DONE IT: When the case came on for trial the court decided against the architect and in favor of the owner on his counter claim, saying, "That the construction of the building was defective is clearly shown by one of the walls being so badly cracked as to depreciate the value of the building. The architect does not deny the existence of the crack but attributes it to a defective foundation at the place in the wall where it is found. It was the architect's business and duty to see that the building was constructed with reasonable care. A building is not constructed with reasonable care when the foundations are so defective as to cause the walls to crack. The building by repairs and alterations, we conclude, from the evidence, could be made to be of the value it would have been had it been constructed with proper care for about the sum claimed by the architect. We, therefore, conclude that the architect ought to recover nothing in this action and a judgment for costs should be entered against him."

Contractor's Claim for Extras Not in Writing

● WHAT HE DID: An owner desired to remodel a certain building. The contract expressly provided that no extra work would be allowed unless an itemized estimate thereof should be submitted by the contractor, and an order in writing be given by the architect. After the contract had been fully performed and paid for, the contractor put in a claim for alleged extra work he claimed had been orally authorized by the architect, although never furnishing the itemized estimates called for.

WHY HE DID IT: The contractor insisted that he had done certain extra work and that he was entitled to be paid for it even though the provisions of the contract as to extra work had not been complied with, claiming that the architect was the owner's agent and as such had waived the provisions with respect to "extra work."

WHY HE SHOULDN'T HAVE DONE IT: The court, however, decided against the contractor and in favor of the owner and, in explanation, said, "The architect was expressly made the agent of the owner for the purpose of the contract, but such agency, so far as it related to making alterations or directing that extra work should be done, was limited to such orders as the architect should give in writing. The restrictions on the authority of the architect were for the protection of the owner. The contractor is not required to make changes or perform extra work unless he first receives written authority therefor and the contract is therefore neither unreasonable nor severe and it should be enforced. An agent cannot enlarge his own powers by waiving the limitations thereon."

There's just one material that will stand a test like this

THE NEW CARNEY CEMENT

THIS cube of common brick, laid up with one part new Carney Cement to three parts sand, was immersed for two days in sodium sulphate solution to a depth of one-half inch. Sodium Sulphate, as you know, is the common cause of efflorescence. The lower brick absorbed the solution immediately and efflorescence became apparent in it within twenty-four hours. But Carney Cement prevented its spread into the joint and the upper brick completely—which demonstrates two great improvements—the control of efflorescence and the effective resistance of this new material to the absorption of moisture. This same test was tried with several other materials, and in every case the solution was drawn up through the joints into the top bricks, causing hideous disfigurement.

The perfection of a masonry material that resists the spread of efflorescence and assures water tight joints is but one of the marked advances in Carney Cement. Now, Carney Cement attains its full smooth working qualities the instant it is mixed—without soaking, slaking or adding lime. Furthermore, because of its moisture resisting characteristic, it holds colors perfectly. A Carney representative will make a practical demonstration for you in your office or on the job. Call your nearest office.

THE CARNEY CEMENT COMPANY

DISTRICT SALES OFFICES CHICAGO CINCINNATI DETROIT ST. LOUIS MINNEAPOLIS

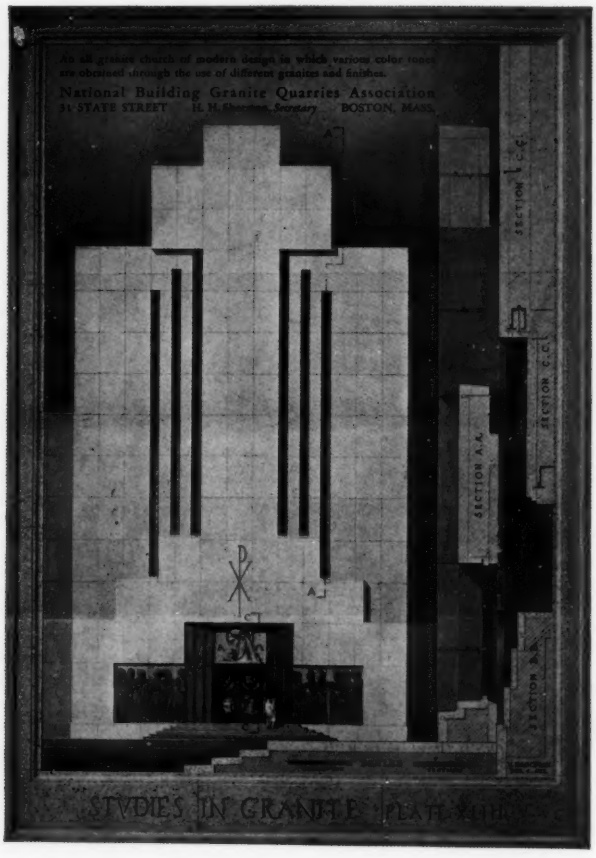
Mills: Mankato and Carney, Minn.

Originators of Masonry Cement—Established In 1883

CARNEY CEMENT

for Brick and Tile Mortar

THE READERS Have a Word to Say


An all granite church of modern design in which various color tones are obtained through the use of different granites and finishes.
National Building Granite Quarries Association
31 STATE STREET H. M. Thurston, Secretary BOSTON, MASS.
SECTION C.C.
SECTION A.A.
STUDIES IN GRANITE

• AN ARCHITECT WHO ADVISES MANUFACTURERS

NOTE: The editors were sent a proof of one of the excellent "Studies in Granite" of the National Building Granite Quarries Association with the comment that, "It is intended to prompt the architect to think in terms of modern quarry methods of granite when designing buildings to be executed in that material." Upon inquiry, the following letter was received from Vahan Hagopian, A. I. A.

Editor, THE AMERICAN ARCHITECT:

YES, I am doing the entire series of the "Studies in Granite," of which I sent you Plate 43.

At the inception of this work I suggested to the National Building Granite Quarries Association this method of presentation of their material to the architectural profession. My theory was that this academic form of illustration would appeal to the architect as well as to the student and besides, it having an attention commanding value, would help to make the new generation in the profession granite-minded.

The Association's hope of getting about one thousand requests for reprints has been exceeded by more than ten thousand already. I understand that several architectural colleges in the country are placing these plates in the hands of students as examples of composition and rendering.

I also have reasons to believe that a series of 26 plates which I made for the American Enameled Brick and Tile Company was the cause of glazed brick being used in the Chrysler Building. These plates depicted new uses for decorative purposes of a material heretofore used in courts and service quarters.

Among other such accounts I have the Anaconda architectural bronze and the Hanley tile. I also advise a number of building material manufacturers as to their products.

At present most advertising pages are so hideously laid out that they are unbecoming to the standard and dignity of a paper serving a body of highly cultured professional men.

Most manufacturers at present sin by ignorance. Often they are advised by an agency whose art director knows nothing about architecture and architects, and who makes no distinction between the architect and the public to whom he also tries to sell canned soup. The advertisements are laid out with the same appeal and illustrated with the same methods, with the result that unless the architect is actually looking for such information he will turn the page. . . . The manufacturer not getting the expected returns on his advertising campaign will discontinue or curtail it to the detriment of the magazine to which he is vital.

Concluding this letter, for the length of which I apologize, I wish to refer you to an editorial "Advertisers who Forfeit Respect" which appeared in THE AMERICAN ARCHITECT, April 1931, in the department "As It Looks to the Editors." And also to the one by F. S. Lawrence which appeared in THE AMERICAN ARCHITECT of November, 1929, under the heading of "The Architect as an Advertising Objective."—*Vahan Hagopian, A. I. A.,* 400 *East* 58*th street, New York.*

• AN IDEA TO KEEP DRAFTSMEN EMPLOYED

Editor, THE AMERICAN ARCHITECT:

IN these days of general gloom in architectural circles with perhaps hundreds of draftsmen tramping from one office to another seeking employment, the question arises, "Why is it that architects dismiss the draftsman as soon as a slack spell occurs? Is it not possible for architects to carry their men over these periods?" In answer to this puzzle, I am writing with a hope of promoting possible improvement in the relation of the architect to his draftsmen.

We cannot overlook the fact that the average architectural draftsman is handicapped by the confinement of his employment, which curbs his view and thought of the various problems pertinent to an architect's suc-

NO SHEEN

or unpleasant reflection detracts from the soft beauty of this tile roof. And yet it is perfectly appropriate for the chateau character of the detail. The pattern used is Ludowici "Antique" Shingle Tile. Note the barrel tiles used on the ridges and hips, and the fine texture due to warpage of the tile as well as to the actual laying. Ludowici Tile is the most adaptable of roofing materials in its appropriateness for all types of architecture. The cost is reasonable, the protection permanent. We will gladly mail our catalogue or have a representative call. And, your attention is called to our pages in Sweet's.

Residence of A. B. Steele, Chestnut Hill, Pa.
Robert McGoodwin, Architect

LUDOWICI TILE

Made by LUDOWICI-CELADON COMPANY

CHICAGO: 104 SOUTH MICHIGAN AVE.

NEW YORK: 565 FIFTH AVE. • WASHINGTON: 738 FIFTEENTH ST., N. W.

cess. As a rule, he is ignorant of the possibility of heavy losses on certain architectural commissions. He has never been introduced to the well-known Green Dragon —"overhead expenses," "costs," "back charges to the architect for errors," etc., and he seldom stops to analyze his obligation to his employer other than the giving of so much service for an agreed sum per month.

It is quite true that the architect's fees are considerable, but it must be remembered that a goodly portion of a fee is absorbed in the drafting room. For an architect to succeed he must pursue a course similar to those in other lines of business, namely: the overhead's relation to income must be continually watched and controlled, and should this be ignored a draftsman is sure to lose his position with a possibility of the architect passing out of the picture also.

We must expect that some fine day the draftsman will see the possibility of securing his first commission; as a rule he is all enthusiasm. He does not stop to take inventory of his qualifications but feels that with his drafting room experience he is justified to take this commission and become independent. He puts out his shingle and is the last word in self-satisfaction. He does not realize that to succeed he must receive additional commissions and at reasonable intervals.

Has he taken this first commission at the established fee or did he cut his fee to attract a client? Does he realize that he is now competing with a hundred or more established architects, most of whom have many completed buildings to their credit; in other words, established reputations, which is one of the most valuable assets to a practitioner? Does our beginner have sufficient foresight to know the necessity of sufficient capital to carry on his business over slack periods? Has considerable of his labor put in sketches come to naught? I am afraid he has overlooked many of these important details and it is to be expected as there are many important departments in an architectural office's make-up of which he is ignorant, and I can almost say he is now discouraged and cannot understand why as an architect he should meet failure when he was going to the top of the ladder in the drafting room.

Viewing this situation from another angle, let us assume that this draftsman made it his business to secure commissions where possible for the firm that employed him. He might succeed in bringing in one, two or more commissions a year and he would naturally receive special remuneration from his firm, making this practice profitable and fascinating. He would become more valuable to his firm and there is no question but what this feature would be readily recognized by his employers. Furthermore, he would have the satisfaction of knowing that while the client he secured would pay the usual fee, the client would be much more satisfied with the complete services of an established and experienced firm than the first piece of work undertaken by a beginner.

As time rolls on and our young friend finds it possible to secure additional commissions, it is more than likely that he will become a junior partner in his firm which affords possibilities and substantial promotions. If our draftsman now wishes to start in the practice of architecture under his own name and with the reputation of the firm that he has been associated with, he is well prepared to do so. But jumping out with that first commission, while a short cut, often leads to disaster and is by no means the quickest way for an architect to succeed.

I might mention that over a period covering thirty years I have seen many young men of promise take this unfortunate jump and in almost every case their business existence lasted less than two years. Furthermore, the unhappy feature of the young architect's failure is that he eventually goes back to the drafting board, broken in spirit, courage gone, and with a distorted view toward the profession that is despair in itself.—*M. Nirdlinger, A. I. A., Empire Building, Pittsburgh, Pa.*

• ARCHITECTS' HOBBIES

Editor, THE AMERICAN ARCHITECT:

I WAS very much interested in "Architects' Hobbies" in "As It Looks to the Editors," published in your May issue. Thinking you might be interested in mine, I am taking the liberty of sending you a specimen.

In extenuation of the perpetration, will explain that the said hobby has been taken up within the last few years without lessons or ever having seen the work done.

I got some "Plasticium," made my own tools, and went to it, with more or less results, and have had some very nice things said about my work.

The enclosed photo is one I "Kodaked" from a self modeled bust made with the aid of mirrors and calipers. Would also add that I was enjoying my seventy-ninth year of age while doing it. One very kind friend remarked that I had made a pretty good job of it, as it looked almost intelligent!—*Edwy. E. Benedict, A. I. A., Waterbury, Conn.*

• MORE ABOUT PIPE ORGANS FOR PUBLIC SCHOOL STAGES

Editor, THE AMERICAN ARCHITECT:

WE note Mr. L. N. Leet's letter of criticism in your June issue, (page 66) which is very interesting. The fact is that in our LaSalle High School we had openings into the auditorium as well as on the stage. When the organ was installed, the openings on the stage were used and those directly into the auditorium were closed and we supposed that this was the policy of the Aeolian Organ Company. We now learn that the openings into the auditorium did not meet the requirements of the Organ Company as to location or size. On that account, the openings into the stage were used.—*Frank A. Childs, Childs and Smith, Architects, Chicago*

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ARCHITECTURE
ALLIED ARTS

BOOKS

ENGINEERING
BUSINESS ECONOMICS

Mantel detail, Stocker House. From "Colonial Houses of Philadelphia"

COLONIAL HOUSES, PHILADELPHIA

By Philip B. Wallace, with measured drawings by N. Luther Miller. Published by the Architectural Book Publishing Company, 108 West 46 Street, New York. Illustrated; 248 pages; size 9½ x 12½; price $20.00.

A FINE collection of pictures of pre-Revolutionary Philadelphia, with measured drawings of many interesting details. The photographs are all by Philip B. Wallace, well-known architectural photographer. Exteriors and interiors go to make up the book, and include buildings still lived in as well as those long since deserted.

ZONING IN THE UNITED STATES

Edited by W. L. Pollard. Published by the American Academy of Political and Social Science, 3622 Locust Street, Philadelphia. Illustrated by maps; indexed; 299 pages; size 6 x 9; price $1.00.

THIS book is part of the annals of the American Academy of Political and Social Science and is a collection of articles published in them. It is divided into four parts, the first part covering the historical and legal aspects of zoning such as zoning laws and their relation to taxation, legal consideration in the planning of airports, analysis of zoning ordinances, etc. The second part covers the procedure of zoning, including standardization of zoning symbols, state zoning, business zoning, mechanics of zoning adjustments, etc.

Part three covers economics and zoning, including zoning and the home, effects of zoning on the investment in public works, etc. Part four covers the general aspects of zoning such as the esthetics of zoning, progress in the science of zoning, etc.

Fireplace in living room above boathouse, Gardner camp. From "Camps in the Woods"

CAMPS IN THE WOODS

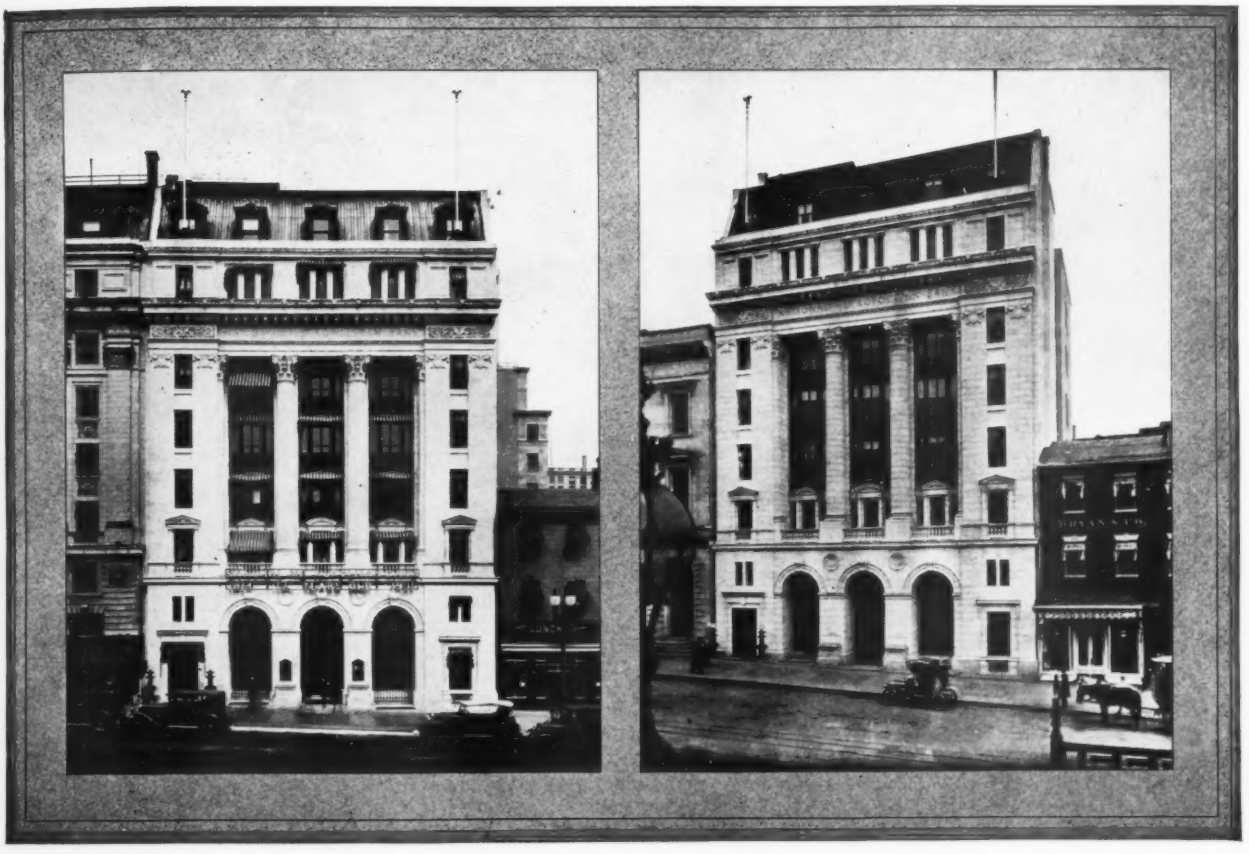
By Augustus D. Shepard, A.I.A.; compiled and edited by R. W. Sexton. Published by the Architectural Book Publishing Company, 108 West 46 Street, New York. Illustrated; 96 pages; size 9½ x 12¾; price $6.00.

MR. SHEPARD has designed many summer homes in rural regions. This book presents a number of pictures and plans of such work of his, together with many photographs of details and also drawings showing construction.

There is considerable text covering Mr. Shepard's ideas of planning and construction; many of the things he has learned by experience are little known, such as the use of a flue enlarging towards the top when the height of the chimney is only about twelve or fifteen feet.

Architects interested in this class of work will find many interesting ideas scattered through the pages of the book, ideas on construction as well as planning and design.

Two photographs of a Georgia Marble building and one of them was taken 25 years ago



NATIONAL METROPOLITAN BANK, *Washington, D. C.*, Gordon, Tracy & Swartout, *Archts.*, and B. Stanley Simmons, *Asso. Archt.*, Thompson-Starrett Co., Inc., *Builders*...One photograph taken in 1931, the other in 1906.

THERE is no change in the *Georgia Marble*... only the *surroundings* have changed. The lunch room on the right has worn several new fronts during the past twenty-five years; a theatre has been built on the left; the runabout with its *buggy top* has given way to the sleeker motor cars of today; *Brownie* and *Pete* have been out of the harness for a score of years.

WHAT CHANGES WILL ANOTHER QUARTER CENTURY BRING?

A photograph taken in 1956 will no doubt show a new building on the right, new types of motor cars in the street, making today's models look angular and clumsy, and possibly a small helicopter hovering in the air waiting to drop into any parking space that might open up.

But through all of these changes, this Georgia Marble will still be as sound and beautiful as it is today... as it was twenty-five years ago, because Georgia Marble is *non-absorptive*. This essential quality deprives the elements of their favorite method of attack . . . getting below the surface and working havoc under cover Georgia Marble being practically *impervious to moisture*, time and the elements can not dull its sparkling beauty. Georgia Marble is easily and economically cleaned —removing any dirt that has collected on the surface reveals its original beauty.

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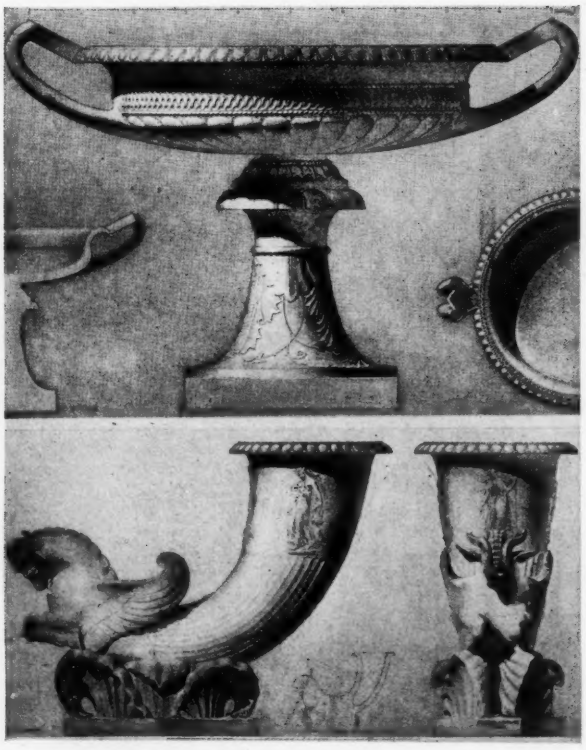
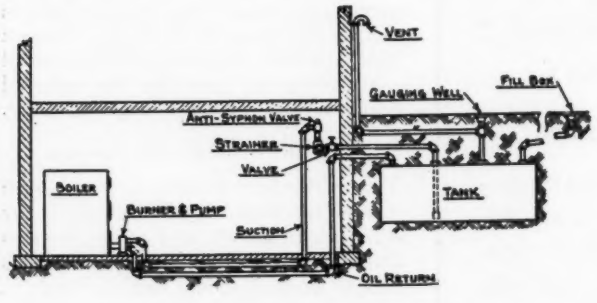


Vase a Pompeii at Vase - Fountaine.
From "Architectural Shades and Shadows"

ARCHITECTURAL SHADES AND SHADOWS

By Edgar Greer Shelton, B.S. Published by D. Van Nostrand, 250 Fourth Avenue, New York. Illustrated; indexed; 159 pages; size 8 x 10¾; price $3.50.

THE problem of architectural shades and shadows is reduced in this book to three fundamental methods, each of which is carefully explained by the author in detail. A number of problems are presented to enable the student to become thoroughly familiar with the actual application of each method. There is also a chapter on the shades and shadows of the orders of architecture.



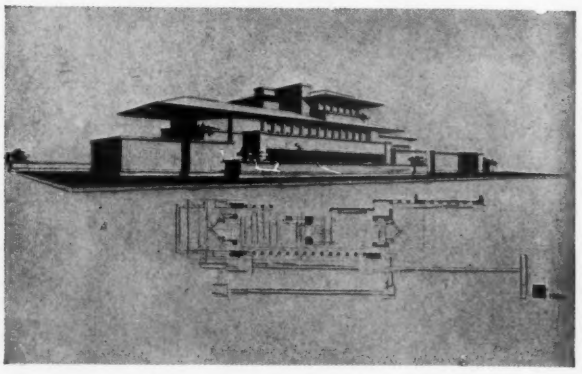
Typical piping arrangement for storage tank above level of burner. From "Handbook of Oil Burning"

HANDBOOK OF OIL BURNING

By Harry F. Tapp. Published by the American Oil Burner Association, 342 Madison Avenue, New York. Illustrated; indexed; 629 pages; size 4¾ x 17½; price $3.00.

"INTENDED as a source of reference . . . a convenient, useful guide in the solution of the problems that are constantly met in everyday commercial practice. Enlarged in scope to embrace industrial as well as commercial and domestic applications of oil as a fuel."

Mr. Tapp, as executive secretary of the American Oil Burner Association, has naturally unusual opportunities to gather authoritative data and to present it in an unbiased fashion. The book covers oil as a fuel; comparative fuel costs; estimating fuel requirements for the heating season; boilers and warm air furnaces; oil burner types and principles of construction; oil burner controls and motors; fuel oil tanks and storage; pumps, preheaters and piping; etc. It is well illustrated by drawings and charts.



From "Modern Architecture," by Frank Lloyd Wright

MODERN ARCHITECTURE

By Frank Lloyd Wright. Published for the Department of Art and Archaeology of Princeton University by Princeton University Press, Princeton, New Jersey. Illustrated; 115 pages; size 8½ x 10¾; price $4.00.

FRANK LLOYD WRIGHT is almost a tradition, despite the fact that he is very much in the land of the living. What he says, as well as his work, always causes a storm of discussion. This book, a series of lectures delivered before Princeton undergraduates interested in architecture, is full of sage observations. It is a human, sometimes enigmatical, document fully expressive of a forcible yet thoroughly lovable personality. It is one of those rare books which, though interesting as a romance, impresses one as bearing the stamp of the immutable logic of centuries.

E. Baldwin Smith, in his introduction to the book, writes, "I, at first, made the mistake of wishing that he had been more explicit, had told more about his methods and less about his theory of life. As I listened to his lectures and talked with the man I saw my mistake, and realized that Wright did not want to give to his public merely his particular forms, developed by him to meet specific conditions. Instead, fearful lest his buildings be copied and repeated as an easy ritual for unimaginative moderns, he wanted only to stir others with his dreams of the possibilities open to architecture in our present age.

"His lectures, then, are not didactic rules and architectural short-cuts for making the possibilities of living expression into a new academic tradition. Rather are they the sermons of an engaging, self-confident and enthusiastic artist fired with a faith." (*Cont. on p.* 110)

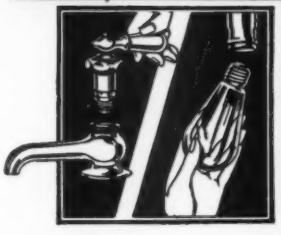
Standardized installation in Rochester Public Schools- . . . . . Fitzke tells why

"In 1919, your Mr. H. E. Agness of Minneapolis helped me select the brass goods for our new Holmes School, then being built by our Board of Education. He insisted on my using Chicago Faucets on this job 12 years ago. We installed 22 pairs of Chicago Faucets and in all that time I have renewed only one washer. So it remains true that your faucets will last the life of the building.

"Now, all of our eight schools are equipped with Chicago Faucets and we call it the Rochester Public School Standard Installation. We now insist on your faucets on all new work.

"I wish to thank your representative for helping me make a good selection."

(Signed) OTTO H. FITZKE, C.E.,
Rochester Public Schools,
Rochester, Minn.



The Chicago Faucet is made with a standardized, removable unit. Only seat or washer ever needs replacing. Cost: A few cents. Labor: No harder than changing a light bulb. Body of faucet lasts indefinitely.

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CHICAGO FAUCETS

NEW CATALOGS

Covering What Manufacturers Have to Say About the Advantages and Uses of Their Products

BATHROOMS AND KITCHENS

175 . . . "To Help You Plan Beautiful and Dutiful Bathrooms and Kitchens," published by the Kohler Company, Kohler, Wis., contains a typical showing of Kohler equipment. It presents in a general way some of the things an owner should know about plumbing, and contains illustrations and text giving hints on planning these rooms.

SOLVING THE PARKING PROBLEM

176 . . . Bulletin of the Turner Elevator Company, Kansas City, Mo., illustrating and describing this new type of parking equipment, consisting of an elevator in a circular shaft, the elevator delivering cars at any level to the parking space outside of the circle. Operation is automatic.

WATERPROOFING WITH SIKA

177 . . . Data issued by the American Sika Corp., 56 West 45th Street, New York, describing waterproofing walls and floors of Portland cement with this integral waterproofer.

"WATER, WATER, EVERYWHERE"

178 . . . A thoroughly interesting and educational brochure, beautifully illustrated in colors, giving a number of scientific facts about water. It tells why the ocean is salty, what dew is, what makes a water-spout, how water runs up-hill, and many similar things. It is the sort of brochure which, because of the fine beauty of its illustrations, will appeal to the artist and, at the same time, answer many of the questions which puzzle child and adult alike. Issued by the American Asphalt Paint Co., 844 Rush Street, Chicago, and well worth a place in one's personal permanent library.

NEW GRILLE DESIGNS

179 . . . Booklet containing designs of grilles submitted in the recent contest conducted by the Harrington and King Perforating Company, Chicago. A. I. A. file 30 e.

METAL LATH PRODUCTS HAND BOOK

180 . . . A hand book including practically every type of metal lath and the necessary accessories and sundries for its erection. Issued by the United States Gypsum Company, 300 West Adams Street, Chicago.

THE "ELEVETTE"

181 . . . A new type of miniature elevator specially adapted to the private residence through simplicity of installation and comparatively low cost. Issued by the Watson Elevator Company, 407 West 36th Street, New York.

THE "INCLINATOR"

182 . . . A miniature incline elevator, placed on the stairway of the private house and running on a track up the stairs without restricting the use of the stairway. Issued by the Watson Elevator Company, 407 West 36th Street, New York.

LUNKEN SPANDREL WINDOW

183 . . . Booklet illustrating and describing a new sliding window that can be cleaned from inside the room and also making possible the addition of nearly a square foot of rentable floor area per running foot of exterior wall. Issued by E. H. Lunken, 103 Park Avenue, New York.

HALICO MASTIC TILES

184 . . . Booklet in colors illustrating and describing the mastic tiles made by the Hachmeister-Lind Company, Pittsburgh, Pa.

OFFICE FURNITURE

185 . . . Illustrated booklet issued by Wood Office Furniture Associates, Inc., 420 Lexington Ave., New York. Shows modern types of office furniture and explains advantages of wood furniture.

MERCOID AUTOMATIC CONTROLS

186 . . . Catalog H-7 of the Mercoid Corporation, 4201 Belmont Avenue, Chicago, illustrating and describing automatic controls for heating equipment and industrial applications, manufactured by this company.

STEEL KITCHEN UNITS AND MEDICINE CABINETS

187 . . . Loose leaf folder of the Acme Metal Products Corp., 4217 Belle Plaine Ave., Chicago, illustrating and describing the Majestic all-steel kitchen units and medicine cabinets for the modern apartment. A. I. A. file 35 c 12.

NEW DOUBLE HUNG STEEL WINDOW

188 . . . "The New Georgian Steel Window" is the title of a booklet issued by David Lupton's Sons Company, Philadelphia, illustrating and giving detail drawings of these new double hung steel windows designed to reproduce the graceful pattern of fine windows of the Georgian period. A. I. A. file 16 e 1.

SPECIFICATIONS FOR THE USE OF WHITE LEAD PAINT

189 . . . Booklet issued by the National Lead Company, 111 Broadway, New York, with the assistance of the American Institute of Architects, giving specifications based on modern painting practice. Covers preparation and general requirements, materials and mixings on various bases, application of paint to various materials, etc. A. I. A. file 25c.

PROTECTION FOR WOOD AGAINST ROT AND WOOD-EATING INSECTS

190 . . . Illustrated booklet issued by the E. L. Bruce Co., Memphis, Tenn., explaining Bruce Preservatives developed for this company. A. I. A. file 19 a 31, 19 a 34.

August, 1931

● AMERICAN ARCHITECT

57th Street at Eighth Avenue, New York City

Please see that I receive the following catalogs reviewed on this page:

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The standard colors of "Weathered Effect" Shingles (any of which are subject to change if desired) include Royal Red, Sylvan Green, Lindenwold—a mossy green-black—and four blended tints of soft autumnal browns known as "Rustic Blend."

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A PROMINENT Philadelphia Architect recently said "I'm sold on the economy and wearing qualities of Ambler Asbestos Shingles but with any shingles I often end up by saying 'But that's not quite my color.' I usually want a certain shade which no company can supply."

However, we told the architect that there were mighty few shades which we couldn't match with our new exclusive process. And with practically no delay we matched his sample.

The new Ambler "Weathered Effect" rigid asbestos shingle is enduring and fireproof and has all the mellow charm of an old shingle roof.

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AMBLER ASBESTOS SHINGLE & SHEATHING CO.
Ambler, Penna.

Let's Face the Facts and Go Back to Work

(*Continued from page* 30)

the facts, interpreted with utter honesty, will dispel gloom rather than engender it Ghosts and phantoms are more terrifying than tangible dangers.

Frank analysis will do far more than deception to ward off panic. The American people have stamina and backbone. They can endure hardships but they are entitled to know what to expect. The honest analyst is neither an optimist nor a pessimist. He tells faithfully what he thinks the facts mean.

IF we know what to expect we can make plans accordingly. Sound planning is more vital than it ever was before. Over-estimate is far more dangerous than under-estimate. The soundest philosophy is to hope for the best but to be prepared to make the best of the worst. It will require the best brains of the nation to determine what to expect in the next five years. It seems of little purpose to measure the future by statistics of the more recent past. We are confronted with conditions which have not been paralleled since the world went to war—and that was 17 years ago. We emerged from that conflict far wealthier than when it began. We had the means to gratify our every desire and all nations were our customers.

For a decade and a half, save for a brief period of drastic deflation in 1921 and minor recessions to catch our breath, we climbed steadily to unprecedented heights of national prosperity. Pollyanna, smiling radiantly, sat enthroned, heedless of danger to herself while other nations, one by one, slipped into the quicksands of depression. Desperate, they raised within their own domains every possible ounce of foodstuffs and bought the rest where they could buy cheapest. Overseas markets for our agricultural surplus withered away. Foreign demand for manufactured products dwindled and, to cap it all, we raised artificial tariff barriers which aroused enmity everywhere.

At almost the same time home markets became glutted with commodities of every kind which our own people, already gorged, were unable to absorb. Accumulation of surplus stocks precipitated the punishment which was inevitable after a prolonged and frenzied orgy of speculation. Thus came the cold gray dawn which put to rout the new school of economists which had proclaimed our entry into a new era with no more cycles of recession and recovery.

So sudden and so colossal was the reverse that it was impossible immediately to assess its effects. Even today we still are stunned and can comprehend its extent only by comparing our present volume of business with the peaks of 1929. For example:

The daily average value of building contracts awarded in May of 1929 was $22,500,000 while in May of this year it was $9,500,000, a drop of 58 per cent. Domestic sales of passenger automobiles in May, 1929, aggregated 454,000 and in May, 1931, the total was 264,000, a decline of 42 per cent. May freight car loadings were down 30 per cent and Prof. Fisher's wholesale price index of 200 representative commodities had dropped from 97.1 to 70.3, or 27 per cent. First quarter exports were cut in half. Other barometers show proportionate declines.

Details of what has happened in the last year are too fresh in mind to require enumeration. The number of unemployed probably has averaged at least 5,000,000. Virtually every factory and mill hand has worked only part time and many of them have taken wage cuts. The white collar man who has not had a salary reduction is a rarity. The same applies to all varieties of office help, male and female. In many cases the initial salary cut has been followed by a second and in countless others the same result is being attained by enforced vacations without pay. Dividend payments have been sharply curtailed. The national annual income has been reduced by fully $12,000,000,000.

All this is history, although it isn't widely known because the facts haven't been given to the public. We are concerned chiefly with what the future holds. Distress has been cumulative. The reserves of millions of families have been wiped out. Expenditures have been curtailed by almost everyone. The average worker is prudently laying aside every possible penny in preparation for possible unemployment. Factories will close earlier and longer for mid-summer "inventory." Seasonal activities have done little more in relieving unemployment than to offset additional dismissals.

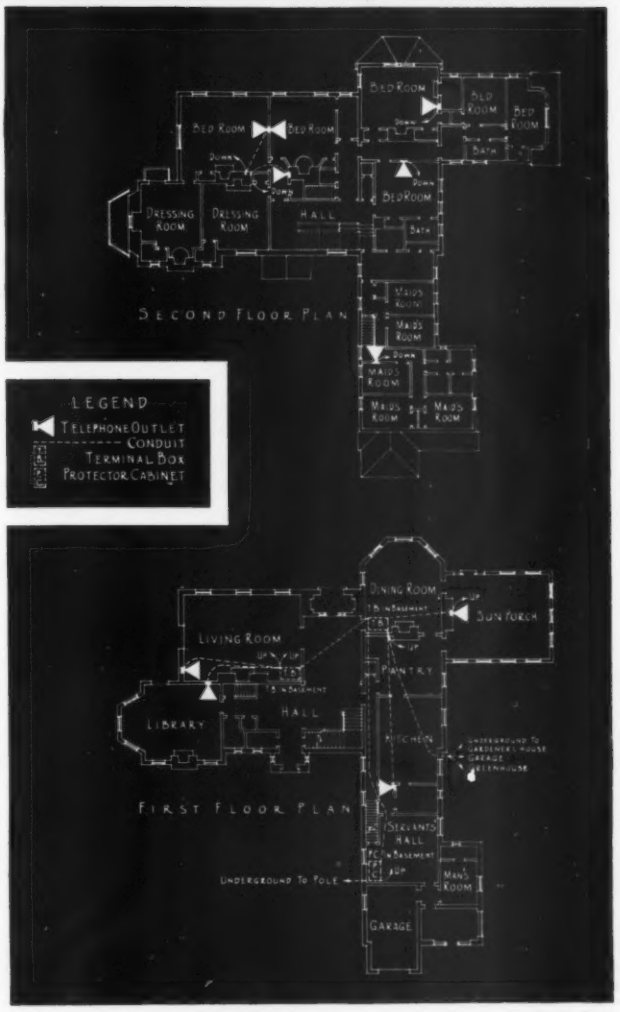
These are simple facts but it is the interpretation of them in respect to the future which is important. Upon what ground can we honestly base expectation of an early or pronounced recovery? We have no great shortages to be filled. There still are surpluses of many commodities. We can expect no relief from the construction industries. We are away over-built now on everything except, perhaps, homes. There can be no great expansion in public works because federal, state and municipal governments are hard pressed for funds.

AGRICULTURAL income will show little expansion. There is no shortage of serviceable motor vehicles and estimates of replacement necessities have been greatly exaggerated. Few railroads have the money to initiate improvements on a large scale or to replace worn rolling stock. All the industries which cater to the construction trades face a long period of depression. Little expansion is to be expected in textile operations. With their principal customers buying in diminished quantities iron and steel can make but little progress. We can expect slight help from foreign trade.

What, then, is to set in motion the fall recovery about which many persons are talking? Or a spring expansion more than seasonal in its scope? Far more reason to believe we are faced with a long period of relative stabilization at levels much below the recent peaks but well above those preceding the war inflation. The long swing trend promises to be steadily upward but the slope will

FOR LARGE ESTATES . . . THIS ROOM-TO-ROOM AND BUILDING-TO-BUILDING TELEPHONE SERVICE . . . OVER REGULAR BELL TELEPHONES

Built-in telephone conduit serves fifteen outlets on the estate of Mr. Halstead Lindsley, Lenox, Massachusetts. Ten are in the residence itself and five in the three outbuildings (two in the garage, two in the gardener's cottage, one in the greenhouse). Underground conduit connects the house telephones with those in each of the other buildings. JOHN C. GREENLEAF, Architect, *New York City.*



COTTAGES, greenhouses, stables and garages, grouped around a residence, make the large estate a little community. Such a community, like every other, has its own telephone requirements. Communication from one room in the residence to another, or to any outbuilding, is always desirable, often essential.

This complete telephone convenience is best achieved by the aid of telephone conduit, built into the walls and floors of the residence, run underground to outbuildings . . . in combination with one of the several intercommunicating systems developed by Bell engineers.

The conduit conceals all wiring, protects against service interruptions and permits telephone outlets to be located wherever they are most convenient. The intercommunicating system allows calls to be made to any part of the house, to any point on the estate or outside it, with equal ease, over the same instruments. No switchboard attendant is necessary. Calls received on any telephone can be transferred to any other.

Whether you're planning a big estate or a modest home, let the local telephone company help you with the telephone arrangements. Their advice means increased comfort and efficiency. It is given gladly, without charge. Just call the Business Office.

be so gentle we probably shall have to look back to realize we have been going up-grade.

But why despair? Even after nearly two years of acute depression the wealth, the buying capacity and the actual purchasing volume of the United States are so far above those of every other country that there is no possible basis of comparison. The conditions which will prevail for the next few years are comparable to those which existed from 1907 to 1914, with the vital difference that the Federal Reserve system has made impossible money panics similar to those of the past. Ample funds at unprecedentedly low interest rates are available to any sound credit risk for any legitimate enterprise which offers a reasonable chance of success.

OUR forefathers made this country great and prosperous with far fewer opportunities than now are open to their sons and grandsons. But we must return to their fundamentals of thrift and hard work. Mass prosperity, which placed inefficients in positions of responsibility and made wealth possible even for the undeserving, probably has gone for at least five years but America still is the land of opportunity for those who deserve success.

That no business can stand still isn't literally true. It can, for a while, but over a longer period it must progress or retrogress. Most concerns engaged in trade and commerce—individuals and companies—have been marking time for two years with steadily diminishing sales. The ever ready alibi has been the depression. True, the total volume of sales has been sharply reduced but in every field there are outstanding examples of men who haven't marked time. They have gone after a larger share of the business available and won it on merit.

Everyone, of course, has done the obvious things. They have cut their overhead and reduced production and selling costs but they deserve no particular credit for that. There was nothing else to do. The commonest ways of pruning expenses have been to eliminate non-essential personnel and cut salaries. This has been necessary but it has impaired purchasing power. No other means has been devised to lower sales costs except the curtailment of advertising.

Concerns which have held their own or forged ahead haven't done it merely by employing these obvious expedients. Many of them have made their products more attractive intrinsically, have built more quality into them and have cut the price to the consumer. They have demonstrated their ability to supply the public with what it wants at a price it will pay.

Price, plus quality and style, are the strongest selling arguments in a period like this. Those producers and merchants who are crying for higher prices to eliminate "profitless merchandising" are swimming against the stream. With an income drastically reduced the public will buy in no larger quantities than it is buying now until the purchasing power of the dollar comes up to meet them. Where low profit margins have been based on much larger volumes some way must be found to make possible the same margin, or a larger one, on a smaller volume. Ways are open to those who have the ability to find them.

With expenses cut as they have been by many concerns, even a slight increase in volume may raise profits to a point where dividend payments can be resumed.

The days when success might be attained with mediocre or even less than mediocre management have gone by. If present executives are unable to adjust themselves to new conditions they must be replaced with men who can. These captains of tomorrow may not be captains today. They may be corporals or sergeants or even privates in the army of industry but plenty of them are available with knowledge, power, ambition and ability to surmount or get around obstacles.

Executives who are hopelessly tangled in the red tape of tradition and precedent are of little use today. We may as well abandon the illusion that the tremendous sales volumes of recent years were the result of superior merchandising ability. They were made possible by a fictitious general prosperity plus an enormous growth in installment selling and an abandonment of some of our principles of national thrift.

Americans bought huge quantities of goods because they wanted them and had the money to buy them and not because the person who made or sold them displayed super-salesmanship. A couple of generations ago few books were written on the psychology of selling but it wasn't because our merchants didn't know that psychology. They did and it would be helpful today if we could study their methods. Maybe if we "asked dad" we could get some valuable information. He could at least recall conditions paralleling those which confront us now.

Nothing is to be gained and much is to be lost by attempting to mark time while waiting for "business to recover." It isn't going to recover in the accepted sense for a long time, neither this year nor next. There may and probably will be gradual improvement but it will be painfully slow. Before we are through we shall have a new conception of what constitutes a normal sales volume and it will be far smaller than in 1928 or 1929.

The rewards will go, to a greater extent than in the past ten years, to those who deserve them. There is today a magnificent opportunity for the individual who can and will go out and get a larger part of the business available. Even in the throes of depression the United States is consuming enormous quantities of goods of all kinds. Those who expect to survive the heavy seas now running must do something more than cling to a raft with one hand. They can't be quiescent and merely wait for rescue. They must rescue themselves.

THERE'S only one way to get business and that's to go after it. The "go-getter" must be supplied with products the public wants, attractively priced, and he will abandon hackneyed, lackadaisical sales methods. There is no room today for mental or physical lethargy. Long hours of hard, intelligent work, with the ability to accept rebuffs cheerfully, will work wonders. Salesmen who make ten calls where they used to make five will find business surprisingly good.

Manufacturers who make the goods merchants sell are faced with new problems. They must not only produce saleable merchandise—no easy task in hard times—but they must use uncommon ingenuity in holding down their costs, especially those which relate to selling. Furthermore, they must maintain strong, virile selling organizations. Consumer demand is of no value if sales outlets to supply it are lacking. And sales outlets which are

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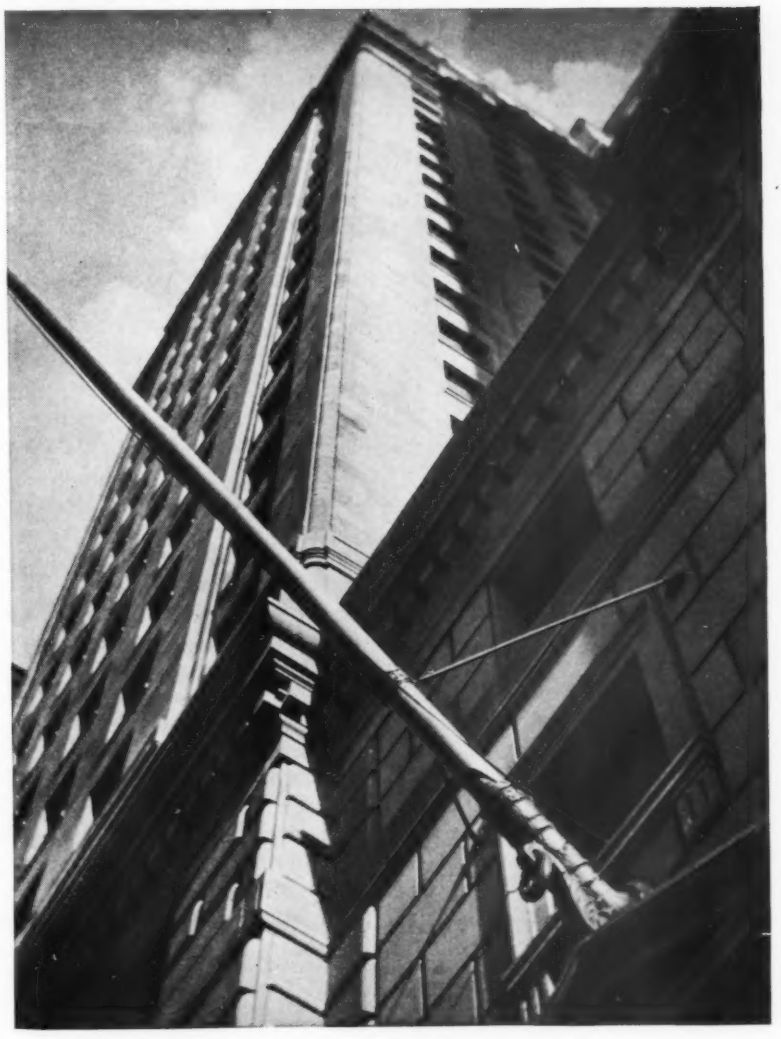

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moribund are useless. Competition for those of the other type grows sharper every day.

The manufacturer must offer not only desirable merchandise but a merchandising policy which will bring him more and better sales outlets than his competitors can get. Furthermore, he must forswear expediency and build for the future instead of for the present alone.

Failures will be many. That bromide about the survival of the fittest will assume a grimmer significance. But out of it all will come a sturdier, abler, more alert and clear thinking race of manufacturers and merchants. Every individual must demonstrate whether he has the skill to carve success out of adversity. If he hasn't he will sink back into the ruck. The opportunities are there for those who have the brains and the will to seek them.

We Represent Every Architect in California

(*Continued from page* 53)

with a district society organized in each. The architects of each district elect from their number a District Advisor who is the administrative officer for the district and a member of the Advisory Council which meets jointly with the Executive Board at stated intervals. The Executive Board handles all of the affairs of the Association within the section; but in matters of general policy or in state-wide activities the two sections of the Board act together. Two regular joint meetings are held each year."

There are two classes of membership: those who subscribe annually to the work of the Association are the active members; all others are termed associate members. The rights and privileges of both groups are the same except that only active members may be officers or serve on committees. In the Northern Section the subscription for 1931 was $3.00. There are no initiation fees.

Particular attention is paid by the Association to new men entering the profession. Immediately upon learning from the State Board of Architectural Examiners of the granting of a new certificate the Association writes to the recipient, advising him of his membership in the Association; and the district advisor of the Association is asked to get in touch with this architect and explain the Association, its organization, aims and objectives. A special effort is made to have new architects attend the annual convention. This year an important event on the convention program will be the presentation of the "Class of 1931."

A few words might be said regarding the keynote of any success which the organization may have had. It is this: every architect is a member of the Association by virtue of having a state certificate; and since no person is allowed to use the title *architect* in California without having such certificate there are no in-between groups. The constitution of the Association provides that "membership shall exist continuously with such registration, except that any member, by written request, may exclude himself from the Association." In the Northern Section there has been only one such request, and not more than two in the Southern Section. It does not follow, however, that all the remaining architects are active members. Not in times like the present!

Some architects felt that with the passing of the amendments to the Certification Act The State Association of California Architects had fulfilled its purpose. But one of the first acts of the Executive Board, in its initial meeting, had been to discuss this matter; and the judgment of those present had been that the Association was to be a permanent organization.

At this point the story turns to something which is new in architectural organizations, although there is an old saying that there is nothing new under the sun.

The Association soon found that little could be accomplished without funds. But there then appeared upon the scene a child of hope which was later to be named by the Northern Section, "Architects' Reports."

It developed, as one architect has very aptly put it, that the profession has a valuable by-product which has been going up the flue. It seems the building industry is very much interested in what is going on in the architect's office; and it willingly pays for this information.

A business-like proposition was offered to the Association, (not, bear in mind, to any individual architect) a percentage of the gross proceeds in return for official recognition and cooperation to the common cause of making the news authoritative and authentic.

THE Executive Board of the Northern Section, during a period of four months, considered every possible angle of the proposition; and finally the contract was entered into February 4, 1930, and the service officially started March 1. No one needs to be reminded that business was poor during 1930. It was a crucial test year for the new enterprise. Suffice to say here, however, the news service came through with great credit and is now firmly established; and the Northern Section received from this source $10,000, the greater part of which has been, or will be expended in undertakings in which the entire building industry benefits along with the architectural profession.

The good work of the Association goes steadily on. In the state legislature of this year further minor amendments to the Act were secured, and the Association threw its strength and influence behind the engineers and helped them secure amendments to their Registration Act. Thus was further cemented a fine feeling of cooperation which exists between these two professions. The Southern Section of the Association has just completed its plans for the inauguration of the report service for Southern California. No miracles are being performed; but the organization is making itself felt both within the profession and in outside circles. And the prospects for the future indicate an even larger sphere of influence and accomplishment.

And, most happily, may be recorded a perfect feeling of harmony and unity of purpose between the chapters of the Institute and the Association. As a matter of fact, the active workers in the Association's affairs are, with few exceptions, the active workers in the affairs of the Institute. At the present time a joint committee is arranging the activities of the Northern California Chapter, A. I. A., and the Northern Section of the Association so that there will be perfect correlation.

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ARCHITECTURAL SERVICE DEPARTMENT

Reorganize the Office of the Supervising Architect

(*Continued from page 25*)

is essential in the handling of Federal building activities. Our citizens are too often prone to look upon themselves and their government as things apart. Citizens of the United States forget that *they* are the government and that government officials are in office to conduct the governmental affairs of the land. Citizens have the right to know how these affairs are conducted and have the right to say how they shall be conducted.

FOR the government to enter into private business in competition with its own citizens is contrary to the principles upon which the government of the United States is predicated. In time of war, the people may be justified in taking over private enterprise as an emergency measure. But we are, at present, at peace and faced by an economic emergency wherein it is desired to provide as much work as possible for as many people as possible as soon as possible. It was upon this basis that the public building program was speedily prepared and put under way. The best interests of this program will be served by placing a large number of buildings in the hands of a large number of architects at one time, rather than attempting to expedite the program through a large bureaucratic organization that is too unwieldy to function advantageously.

Within the past few months, the matter of placing work in the hands of private architects has been speeded up. Approximately one hundred projects are now in the hands of private practitioners. In addition to these, a number of architects have been selected to act as consultants. While a few architects are thus benefited, it is not for this reason that a reorganization of the Supervising Architect's Office should be urged, but rather as a principle of government and one that will serve the best interests of all taxpayers and the cause of architecture in America.

Many other bodies are lending their support to the movement to reorganize the office of the Supervising Architect—among them that of the landscape architects. At a special meeting of the Pacific Coast Chapter of the American Society of Landscape Architects, held May 21, 1931, a resolution was passed which stated in part:

"Now therefore be it resolved that we believe the governing bodies should discourage the further development of working bureaus in such matters, and should encourage the employment of professional firms of skill and ability to develop plans for architectural and landscape architectural work, and

"Be it resolved that we send copies of these resolutions to the President of the United States; the Secretary of the Treasury of the United States; the Supervising Architect of the Treasury; the Chairman of the National Commission of Fine Arts; the Director of National Parks and the Governor of the State of California."

A. L. Brockway, Director of the American Institute of Architects, at the regional conference of the New York State Chapters held June 20 at Cooperstown, N.Y., said: "It is my personal belief that, although smooth words and gestures were spoken and made by Government officials to representatives of the American Institute of Architects prior to the last convention of the Institute in San Antonio last April, there was at heart no sincere intention of bringing about a situation whereby the buildings of the government would be the work of the profession at large in the nation.

"It would seem that those entrusted with the administration of the Federal building program had deliberately determined upon the expansion and tremendous increase of the personnel of the Supervising Architect's Office rather than the utilization of the architect in private practice in any and all localities of the nation where appropriations had been made for buildings to be constructed.

"The underlying principle involved is whether the men who are responsible for the design and execution of the marvelous buildings in the various cities of this nation are to be considered incapable of designing the buildings for their Government, and are to sit quietly by and be told by public officials in bureaus that the Government itself can do the work better, quicker and for less cost than the private practitioner.

"If this claim contained a grain of truth, it would be an indictment of the profession which the profession could not afford to ignore.

"If the government attitude were correct every corporation of any size would be doing its own architectural work rather than employing the private practitioner. This is doubly true because of the fact that a private corporation must make a profit to exist whereas this is not true in the case of the government."

TO convey the wishes of our citizens to our government officials with authority to correct the existing situation it is suggested that a petition be prepared and circulated in every locality of the United States. A suggested form of petition was published in the May, 1931, issue of AMERICAN ARCHITECT. Reprints of this petition may be obtained, if desired, by addressing AMERICAN ARCHITECT, 57th Street and 8th Avenue, New York City.

To organize the movement, a meeting of all architects in every locality should be called and the work of securing signatures to the petition divided among those present. Chambers of Commerce, Rotary Clubs and other civic organizations should be interested as well as engineers, contractors, building material dealers and other citizens. After the petition has been circulated, it may be forwarded to the editorial offices of AMERICAN ARCHITECT for later presentation to government officials.

FOR the complete combustion of one pound of anthracite coal, 150 cu. ft. of air, weighing 11 lbs., are needed, according to the research department of the Petroleum Heat and Power Company. A pound of fuel oil requires 190 cu. ft. of air. A cubic foot of city gas requires 4½ cu. ft. of air, and a cubic foot of natural gas requires twice as much.

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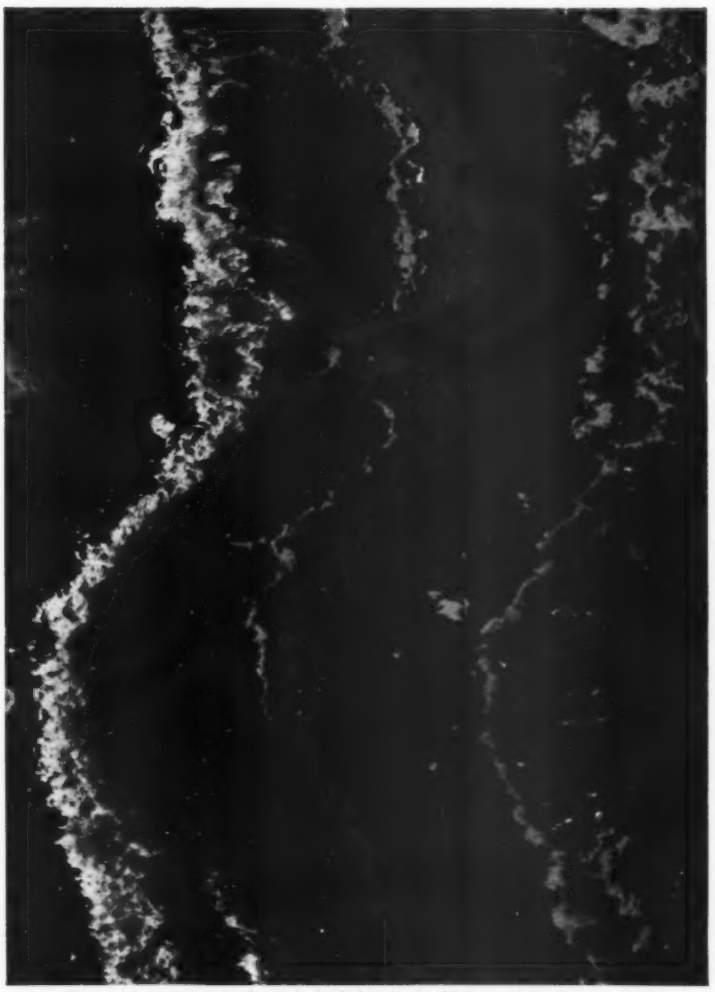

This actual size illustration of part of a block shows how faithfully marble has been reproduced.

FOR the first time in this country linoleum captures *all* the magic of marble. Notice the delicate tracery, the realistic veining. There is a clearness and an intensity of color in these Armstrong Marble Inlaids never before achieved. Each color is inlaid and will not fade.

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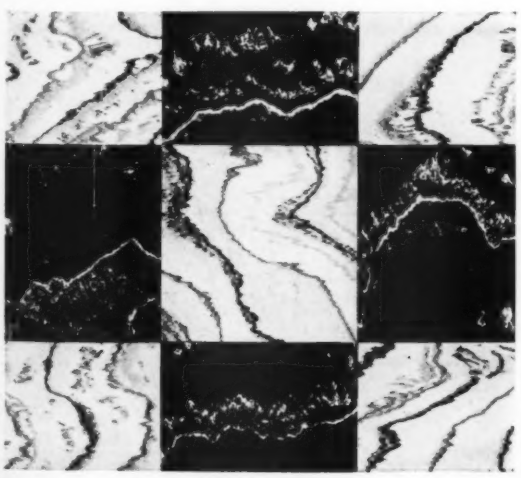
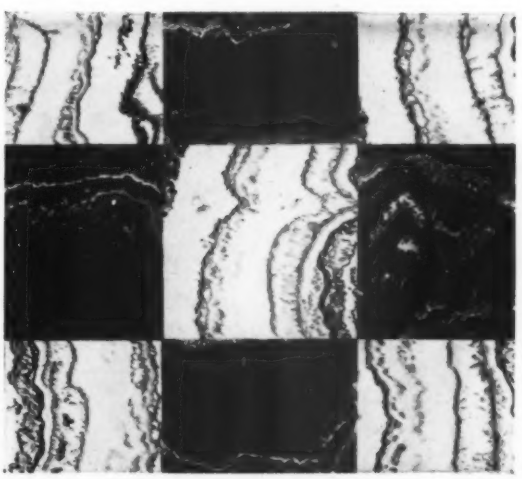
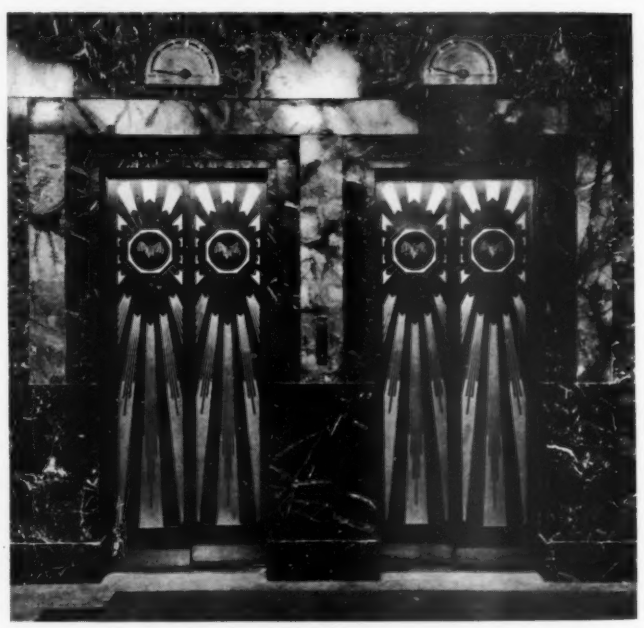


LEFT — This predominantly black and white design is available in three block sizes —No. 151, 6 x 6 inches; No. 153, 9 x 9 inches; and No. 155, 12 x 12 inches.

RIGHT—Observe the depth of color and clear-cut contrast in design No. 150, 6 x 6-inch blocks. Its companion coloring, No. 154, is a 9 x 9-inch block.



The upper picture shows the cars and the lower picture a ground floor entrance manufactured and installed by Otis in the Bacardi Building, Havana. Note the harmony in design and effect between the finish of the cars and the entrance.



IT IS well known that uniformity of design and finish greatly enhance the appearance of a building. This likewise is true of its furnishings. Carrying this truth to elevators, it is logical that the same concern should furnish the complete elevator installation. And that is why the architect will find the uniformity of design between Otis elevator entrances and cars and fixtures particularly helpful, either in planning a new building or in modernizing an old one. Harmony in Otis design is apparent in the two pictures at the right showing cars and entrance of a recent installation. Also, Otis foundries and shops are amply equipped to produce any special design or finish that the architect may wish. . . . The Otis plan of keeping elevator equipment in perfect running order, making regular examinations and all necessary repairs and replacements, for a flat yearly rate, is a service that is appreciated everywhere.

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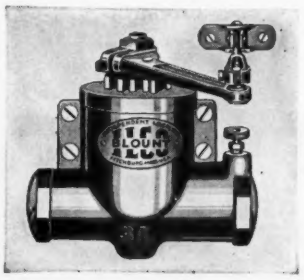


How to Figure Structural Steel Costs in 30 Minutes

(*Continued from page* 59)

of stories. The column chart on page 59 expresses this relationship.

The preliminary calculations for the *use of the floor chart* may be made with any degree of accuracy. But it must be kept in mind that the final answer will have the same degree of accuracy. In figuring steel for alternate designs, loads must be estimated to include beams and girders with the finished floor structure, partitions plastered, etc., all assumed as uniformly distributed. Special care should be taken in estimating the average area between four columns; it is then only necessary on the chart to spot the bay size on the horizontal axis, move vertically up to the proper design load line, and from this point of intersection to go horizontally to the vertical axis, *where pounds of steel per square foot of floor or roof are found,* with inclusions as noted on chart.

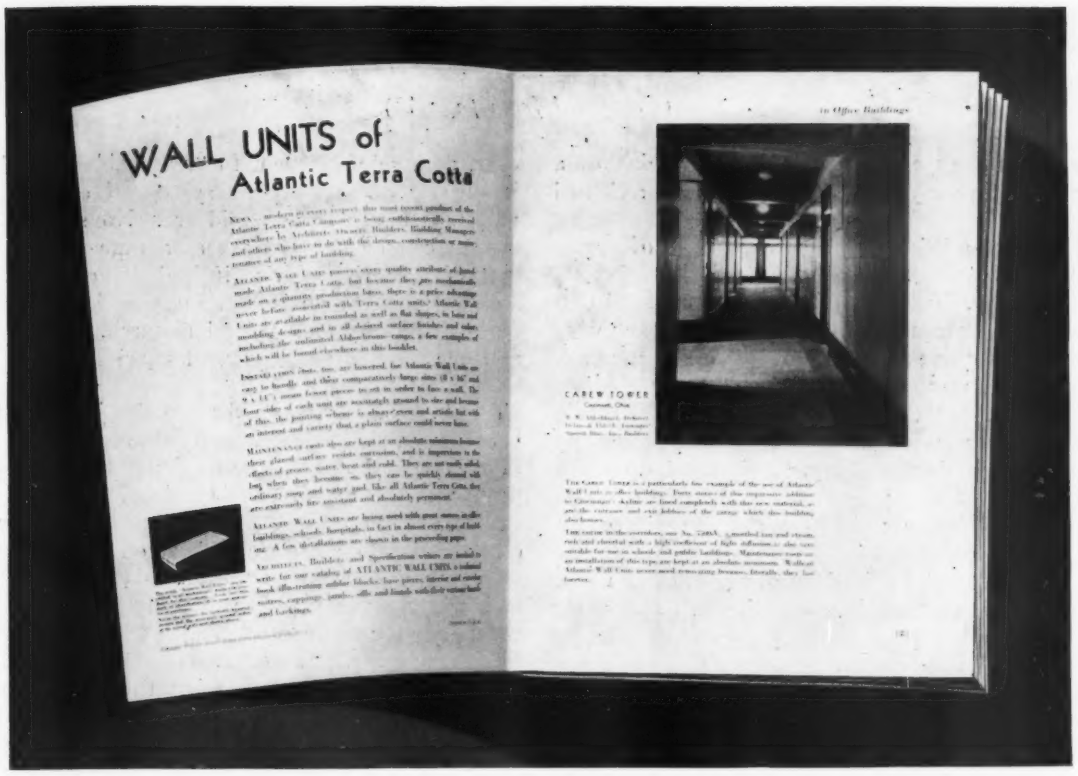
TO *use the column chart,* the uniformly distributed load as determined before must be multiplied by the previously found average bay size in square feet and the number of floors carried by the column. The resulting product, in pounds, may be used as first approximation in getting the steel weight of the column. Adding this column weight plus fireproofing to the product first obtained, will give the total load carried by the column for a second, more correct, determination of steel in the column. Reduction of live loads according to the New York City Building Code having been considered (see note on chart), this total load is found on the horizontal axis of the column chart; go up vertically to intersection with inclined line corresponding with the number of stories under consideration. From this point a horizontal move to the left will strike on the vertical axis the number of pounds of steel per lin. foot of column height. This figure multiplied by the story height in feet and divided into square feet of average bay size, as used in the beginning, *gives column steel in pounds per square foot of floor.* Add from 5% to 10% for splicing and column base, depending on bay size.

After a careful study of this article and charts, anyone should be able to make a computation in about thirty minutes. With increase in skill, this time can be reduced and judgment and accuracy increased to come at least within 2% of the actual or projected tonnage. *Given the same care in estimating alternate designs, the charts guarantee the same accuracy or error, and thus even a small saving in steel may be detected.*

To illustrate the range of accuracy in use, a tabulation of three examples is given below.

Building	Floor area in sq. ft.	Number of stories	Typical Bay in sq. ft.	Average story height	Design load per sq. ft.	Actual Total Steel per sq. ft. of floor	Estimates with Charts
Office Building on Times Square.....	642,000	25	460	10	200	19.90	20.2
Office Building, 120 Wall Street.....	*550,000	34	785	12.2	†200	28.00	27.62
Beaux Arts Apartments	‡215,000	17	275	8.95	150	12.80	12.35

* Estimated. † Assumed. ‡ Estimated from architect's drawings.



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In an endeavor to be of constructive service to those architects who are interested in the subject, we have recently compiled an illustrated booklet in standard A. I. A. size. It presents in pictorial form with brief description, the wide range of uses for these Wall Units. It is designed to enable the architect to determine readily the applicability of these new Wall Units to his individual requirements.

We shall be glad to send a copy of this booklet to the office of any architect upon receipt of letterhead request.

You are invited to view an interesting exhibit of Atlantic Terra Cotta at our New York address.

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What to Tell Your Lawyer When You Sue

(*Continued from page* 43)

the planning and supervising of the construction of a building is only poorly paid by a commission reckoned fee of 6%.

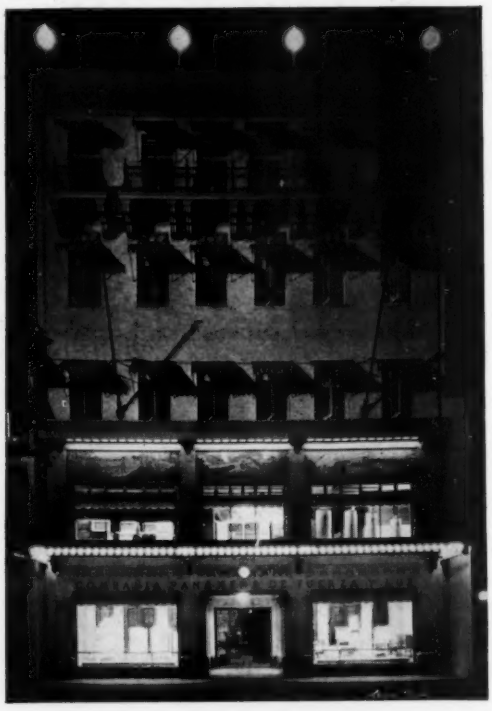
Architects have fallen into a careless habit of speaking of architectural service as the furnishing of plans and specifications. They sometimes win their legal case because the lawyer on the other side does not know what a small part of the actual cost of rendering architectural service the mere mechanical making of plans and specifications is. Let the defense attorney stand before a judge and jury and wave a roll of blue prints and a book of specifications and say, "This is all my client got, a mere roll of blue prints and a collection of typewritten pages which any draftsman and typist could produce for a few hundred dollars. My client has already paid him $1,000 and he is demanding $20,000 more. I say to you this contract is not equitable. It amounts to robbery. It is therefore contrary to public policy to enforce it." And what does the jury do? It finds for the defendant, and the architect's advocate cannot help him if he has a contract with no other consideration than plans and specifications.

If there is no contract, reasonable and customary practice may be introduced as proof, and expert architectural witnesses can be brought into the case to prove valuable consideration. In such cases, however, as a reinforcement to "reasonable" an adequately intelligible cost accounting system of office records is valuable supplementary evidence. No such accounting system can be considered an accurate criterion of the cost of rendering service if it does not allow interest and depreciation on capital invested in education, experience, library and general research, office equipment and overhead as well as actual salaries paid.

IT is helpful in making clear to the jury if all of the esquisses, studies, preliminary drafts, etc., are brought in and offered as evidence of the processes involved in producing the final results obtained. A clever witness guided by an adroit lawyer can trap the lawyer on the other side into asking questions on cross-examination which will enable the architect to explain to the jury and help them to visualize the long and expensive evolutionary process of developing beautiful, practical, and efficient architectural design. If evidence can be placed before an honest jury showing that an architect has actually earned his fee, the architect's case is won.

It is wise for the architect to keep every scrap of paper and every note made in the process of developing an architectural problem until after he has collected his fee for that service.

Architects need to remember that they cannot visualize



Facade at night, Fuerza y Luz Building, Panama. Buckley, Arango & Lyons, Architects. R. W. Hebard & Co., Builders. Metal work includes the bronze marquise, and hundreds of feet of bronze grilles, railings, etc.

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For the Fuerza y Luz Building in Panama we fabricated in our shops here all the ornamental bronze and iron, including the bronze marquise. All finished work was carefully crated and shipped to Panama, over a thousand miles away.

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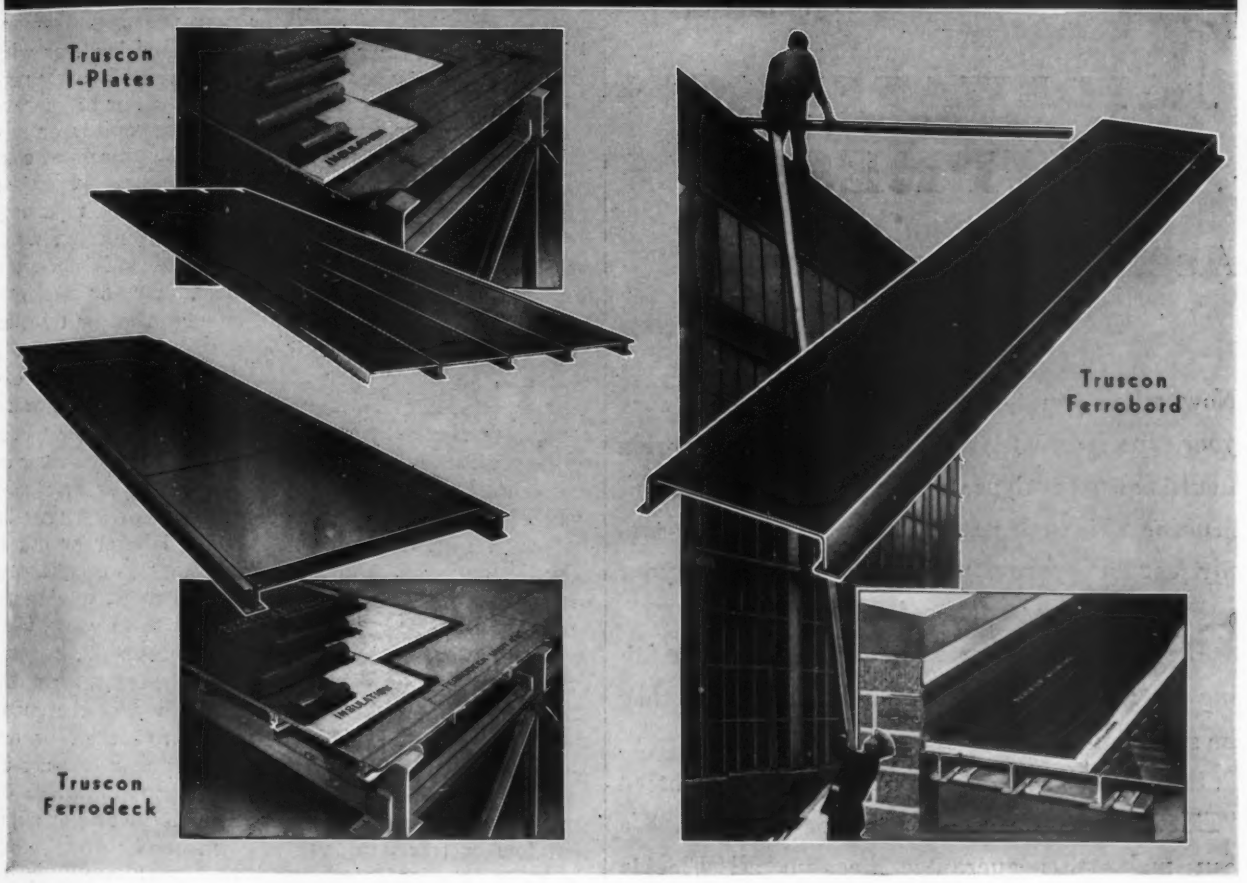

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to others anything that they do not clearly know themselves. If they still subconsciously think that they are engaged in the merchandising of plans and specifications, they will convey that impression to others, and thus do themselves much harm.

Illustration: A Mechanics Lien Law of a certain state provides:

"That any person who shall by any contract or contracts, expressed or implied, or partly expressed or implied, with the owner of a lot or tract of land, or with one whom such owner has authorized or knowingly permitted to contract for the improvement of, or to improve the same, furnish materials, fixtures, apparatus or machinery, forms or form work used in the process of construction where cement, concrete or like material is used for the purpose of or in the building, altering, repairing, or ornamenting of any house or other building, walk, or sidewalk whether such walk or sidewalk be on the land or bordering thereon, driveway, fence or improvement or appurtenances thereto on such a lot or tract of land or connected therewith, and upon, over or under a sidewalk, street or alley adjoining, or fill, sod, or excavate such lot or tract of land, or do landscape work thereon or *therefor;* or raise or lower any house thereon or remove any house thereto; or *perform services as an architect or as a structural engineer for any such purpose;* or furnish or perform labor or *services as superintendent,* timekeeper, mechanic, laborer or otherwise, in the building, altering, repairing, or ornamenting of the same; or furnish material, fixtures, apparatus, machinery, labor or services, forms or form work, used in the process of construction, where concrete, cement, or like material is used, on order of his agent, architect, structural engineer or superintendent having charge of the improvement, building, altering, repairing, or ornamenting the same, shall be known under this act as a contractor and shall have a lien upon the whole of such lot or tract of land and upon the adjoining or adjacent lots or tracts of land of such owner constituting the same premises, and occupied or used in connection with such lot or tract of land. . . . "

NOW, in the interpretation of acts of this nature, the courts have set up in substance that "since mechanics lien legislation is special legislation it shall be strictly construed." It may be supposed that they mean by this literally without implication.

Under this law there have been several decisions against general contractors where they have claimed remuneration for breach of contract, the contractor not having actually executed any work under the contract.

Lawyers, because of these decisions against general contractors who have not done any actual work on the lot, have immediately jumped to the conclusion that architects and structural engineers are not entitled to a mechanic's lien for work which they have actually done unless they have supervised specific construction work at the site. Lawyers arrive at this conclusion because a very large percentage of them have no understanding of the difference between the professional service of an architect and the business activity of a general contractor.

In the light of what really constitutes architectural and engineering work, if the architect or structural engineer is entitled to any lien at all for his services—

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the law specifically says they are—they are entitled to a lien for work done preliminary to the starting of actual building.

The cases of the architect and engineer are not parallel with the case of the general contractor in any particular. One has done something of value to the property that has cost actual time and money. The other has not.

The lawyer's conclusion is based on ignorance of what actually constitutes architectural or engineering service. The professional service of the architect or engineer, or both, makes it possible to determine the earning power of the land, the cost of improving the property, and the feasibility of financing the project—all advance information which has enabled the owner to determine whether it is safe or practical to proceed with the improvement at this time.

The work has been caused to be done by the owner and is for his particular property and no other. It could not be used for another because it has been specially prepared for this particular site to meet the needs of this particular owner. The law says "for the purpose of,"—the architect's and the engineer's service before construction is "for the purpose of"—*"perform labor or services in the building" "or furnish"*—labor or services. The architect has furnished both "labor" and "services."

Nothing so impresses the average jury as a graphic illustration of the time and painstaking labor involved in the evolution of a beautiful bit of ornament, the study of mass in silhouette, or the devising of an efficient bit of practical detail. With the development sketches in evidence, it is possible to paint the picture graphically. The law and the contract may be on the side of the architect but unless the judge, jury and advocate can visualize the fact of actual equity, the architect loses his case.

What to Plan For

(*Continued from page* 49)

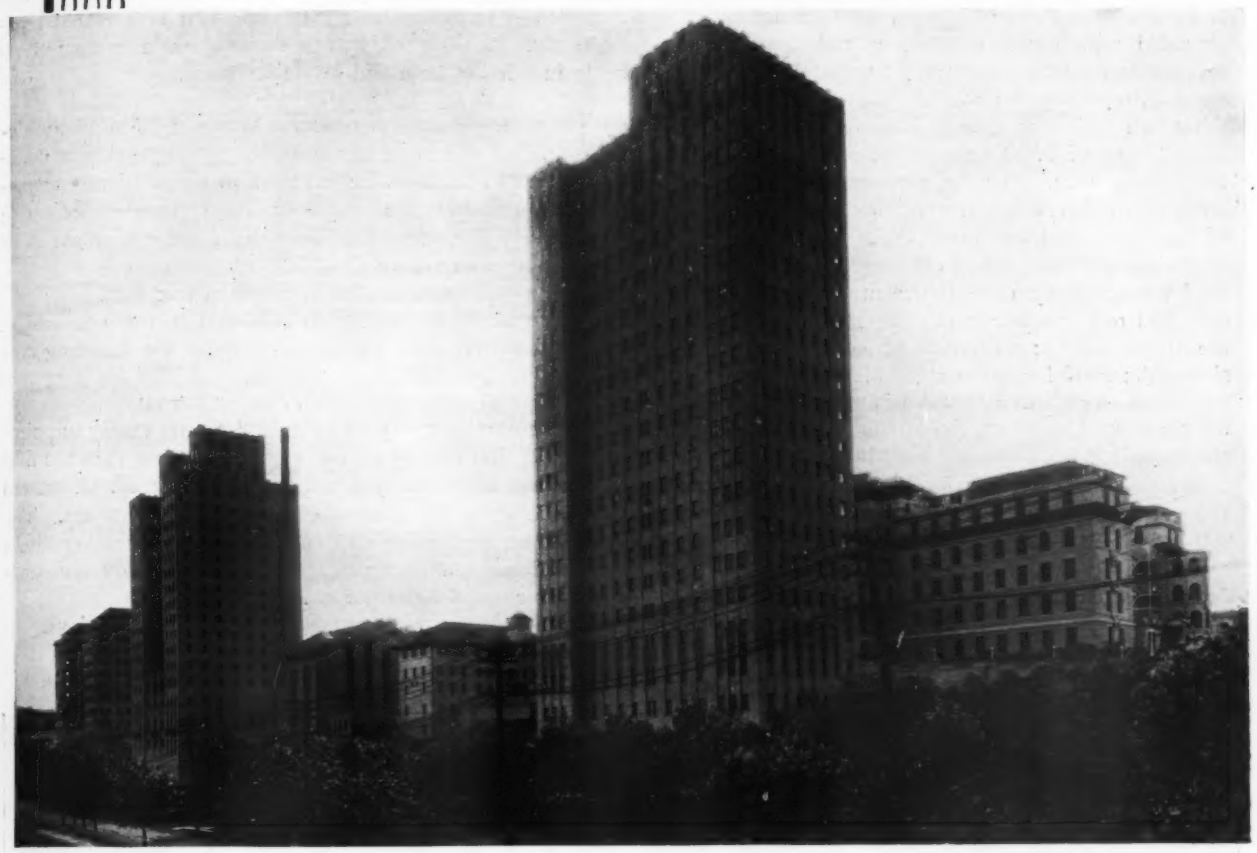
provided for the necessary mechanical equipment and storage rooms. A third basement, just below the street level, should provide for a grill room of 2250 square feet to serve 140 persons, and an adjacent wash room.

It was determined that the first floor should contain the main desk, coat room, steward's office, service entrance, telephone exchange, and ladies' entrance. It was believed important that the steward's office should control the service entrance, the telephone exchange, and be readily accessible from the members' lobby, and that the ladies' entrance should be entirely independent of the club lobbies, and yet be easily accessible from them.

A space of two thousand square feet was allocated to the main lounge on the second floor and provided with easily accessible telephone booths, wash room, and other facilities.

The third floor was selected for the library with a capacity of 15,000 volumes and a floor area of 2750 square feet. Telephone booths, wash rooms and other facilities were also believed essential for this floor. It was also believed that the water and soil lines should be so located that maximum protection would be afforded

When Progress Demands Holtzer-Cabot Serves



Superintendent of Group: Dr. George V. O'Hanlon

Architect: John T. Rowland, Jr.—Jersey City Hospital. Christian H. Ziegler—Margaret Hague Maternity Hospital.

Engineer: Frank Sutton, New York City.

General Contractor: James Mitchell, Inc.—Jersey City Hospital. Auf der Heide Contracting Co., Inc.—Margaret Hague Maternity Hosp.

Electrical Contractor: Hoffman-Elias, Inc., of New Jersey, Jersey City.

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the valuable library collection from leaks or other faults in the plumbing system should any occur.

An assembly room of three thousand square feet was assigned to the fourth floor; three thousand square feet to a squash court meeting championship requirements on the fifth floor; general office and squash court spectators' gallery on the fifth floor mezzanine; barber shop, baths and dressing rooms on the sixth floor; tenant club rooms, provided with separate entrance and elevators on the seventh and eighth floors; and thirty-two bedrooms and eight living-rooms on the ninth to twelfth floors. The thirteenth floor was arranged for banquet rooms having a total area of 3500 square feet and providing service for 140 persons. The large room can be divided into three rooms by means of folding doors and are capable of five room combinations. A ladies' lounge, dressing rooms and dining-rooms to provide service for one hundred were placed on the fourteenth floor; main kitchen, equipped to serve five hundred persons at one time, on the fifteenth floor; main dining room to serve 126 on the sixteenth; staff lockers and facilities for employees on the sixteenth mezzanine; and a game room on the seventeenth floor. These facilities amounted to about twice the accommodations of the old club house.

It was apparent that to provide these accommodations and not exceed a budget for the building of about $900,000, an unusual solution would be required.

The old club house was pleasantly reminiscent of other days, and the rooms, while not large, were well arranged. It was thought that insofar as possible the proportions of these rooms should be followed in the new building, and that the entire effect of the interior must depend on the absence of "architecture."

The ceiling heights were kept low and the room dimensions small. It may be noted that in the principal rooms the clear dimension between the two center rows of columns is only sixteen feet.

While a complete system of air conditioning is provided, it is so designed that each floor is operated separately. This has resulted in a considerable economy both in installation cost and in maintenance.

THIS same kind of economy was sought in all the details of the building; the plan arrangements and the materials selected were expected to be sufficiently attractive to avoid the necessity of elaborate decorative schemes. On the other hand all of the equipment is of the best, and where desirable, in duplicate.

The building contains 1,150,000 cubic feet.

The contracts were let in 1929 and compare favorably, it is believed, with depression prices. The building cost approximately 55 cents per cu. ft. The building and mechanical equipment cost 77 cents per cu. ft.

The architect may be permitted a little vanity in pointing out that this was 8 cents per cu. ft. less than the first estimate and exactly the same price per cu. ft. quoted at the completion of the preliminary drawings. The building, equipment and all furnishings including kitchens, linens, dishes, in short, everything ready for occupancy cost 88 cents per cu. ft.

The building was completed in 221 working days.

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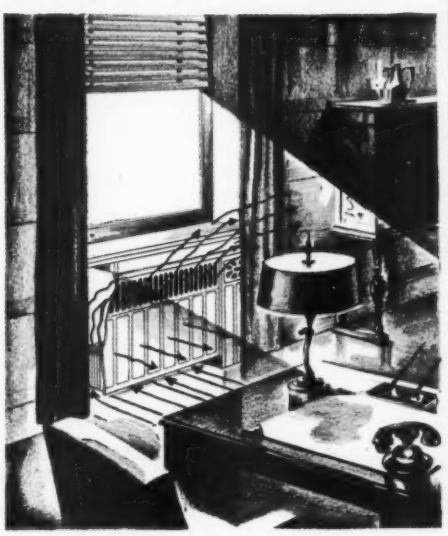
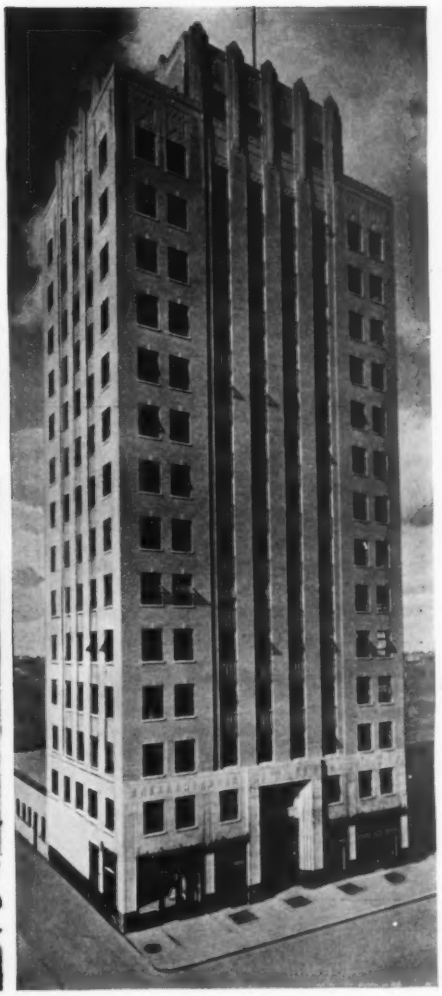
THE VALUE OF BEING MODERN





Broadway Tower Building
Enid, Oklahoma

Layton, Hicks & Forsyth Architects

G. E. V. Blumenauer Associate Architect

John L. Swafford Heating Co. Heating Contractors

MODERN, in today's interpretation of the word, means more than exterior design and interior decoration. It implies demonstrable economy, increased convenience and certainly the highest standards of comfort. To neglect these things in today's buildings imposes an unnecessary penalty on profitable operation in competition with tomorrow's structures. • Modine Copper-Cast Radiators put heating on a "strictly modern" basis. They set a new standard of convenient comfort for the tenant because of their new balanced, convection-radiation principle. They increase his usable floor space. Their dignified design is so simple that they never intrude themselves into room appearance. These things have a definite value in terms of high tenancy rate and a sustained profitable return. • Consider, too, the savings to the owner in installation costs and economies in operation. Check Modine Copper-Cast Radiators by *any* modern standards. The more you examine them the stronger their bid for your endorsement. We'll be glad to furnish complete data at your request.

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Nat'l Title Guaranty Co. Bank . Bklyn.
Corbett, Harrison and MacMurray, Architects

120 Wall Street, Lobby . New York City
Firm of Ely Jacques Kahn, Architects

Club Boca Raton . Boca Raton, Florida
Schultze and Weaver, Architects

Roxy Theatre . . New York City
Walter W. Ahlschlager, Architect

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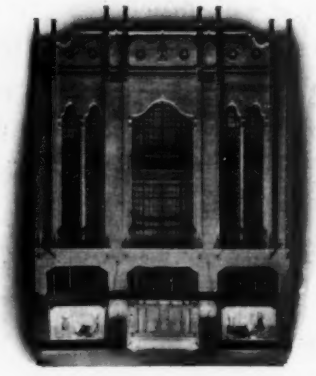

LEFKOVITS STORE
Canton, Ohio
Architects: Lorentz & Lorentz, Canton, Ohio

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Oloron Sainte Marie

(Continued from page 61)

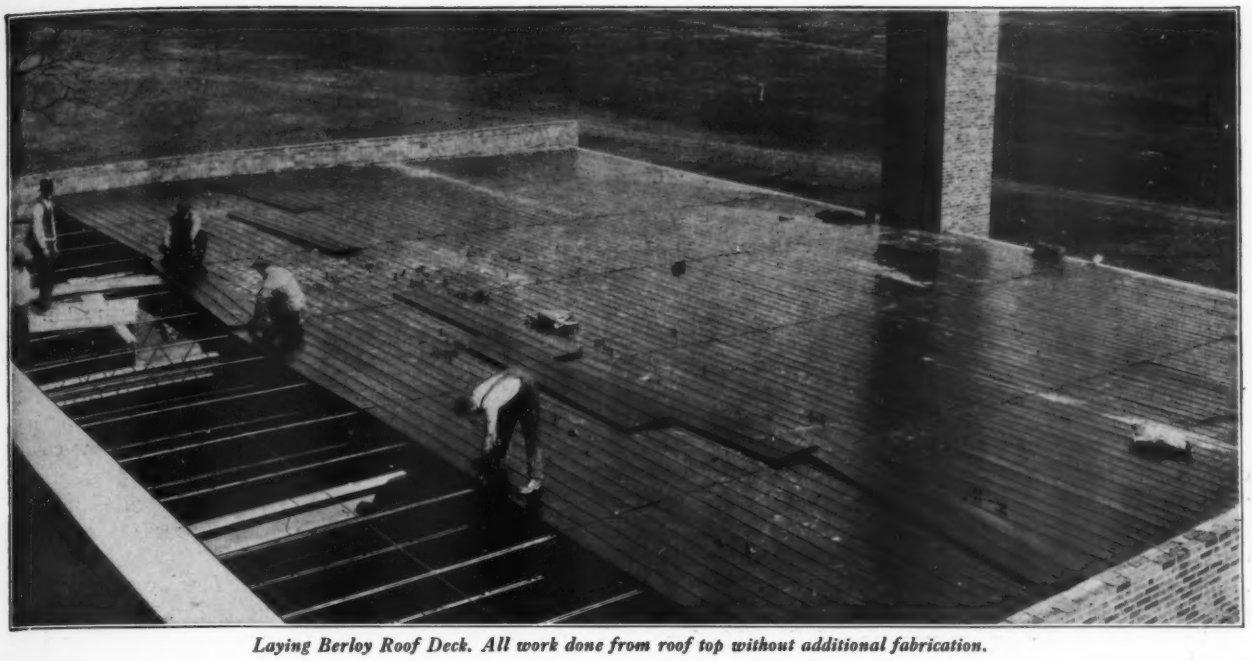
reached from ear to ear in true Southern fashion. All went well and quickly, as we were nearly starved by that time—until a bee found his way into the bottle of wine, the cork of which had disappeared, and was merciless in venting his wrath at having stooped to such folly. But his was the worse penalty—death; while his victim suffered but a swollen lip.

Retracing our footsteps along the stream back to the Place Thiers where a delightful old house hugging the bridge and the stream contrasted agreeably with modern, more pretentious buildings facing the other side of the Place, we climbed to the upper town of Ste. Marie. The church of Sainte Marie, formerly the cathedral of the diocese, begun in the eleventh century, has a heavy square tower, built during the twelfth or thirteenth century, the ground floor of which is an open porch entered through a high Gothic arch. The most delightful feature of the church is a richly sculptured Romanesque portal consisting of three arches, the largest enclosing two smaller arches divided by a marble column.

WALKING back down the hill, we were constantly obliged to find a doorway—or finding none, flatten ourselves against the walls—to make room for a lumbering team of oxen. We arrived at the little park near the station before time for the evening train back to Pau, and, seating ourselves on an iron bench, watched the people come straggling back from the market. The first touch of autumn was in the air; a man was raking leaves in the park and creating a smoke screen with his bonfire. We sat dreamily watching the smoke curl up, until startled by a shriek of the train, and hastened down to the station just in time to hear the trainman shout, "En Voiture."

Seated across from us in our dingy third class compartment and jabbering away in their native Basque tongue were two peasant women dressed in many voluminous black skirts. They were returning from the market carrying large black cloth sacks filled with supplies which they had bought in the village with the money their vegetables had brought. Next to them sat a dapper young man with trousers, neatly pressed but much too short and barely covering his garterless, gray wool socks, and wearing a white tie stiffly starched,—evidently a village dandy off to Pau to hear the band concert in the park that evening.

Making myself as comfortable as is possible on a hard flat wooden seat, I felt the urge of a cigarette, and, addressing the women across from me, I asked, as I had learned to do, "La Fumée vous gêne-t-elle, mesdames?" As I received no response, my pride in my French took a fall, and I carefully repeated the question. They seemed conscious of the fact that I was addressing them, but looked at me blankly until the other occupant of the seat, until then quite absorbed in his own thoughts, mumbled to them words which I did not understand at all. Whereupon they bowed and smiled, and the young man turned to me and said, in French, "No; go ahead and smoke, Mister, if you want to," and nodding in the direction of his companions, added, "they don't understand French."



Laying Berloy Roof Deck. All work done from roof top without additional fabrication.

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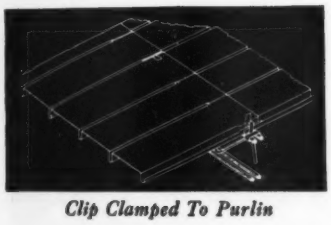

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Today's Swedish Architecture

(*Continued from page 37*)

much used that has double glass with an air space between and that is double rabbeted to more effectively exclude cold air.

With the present enthusiasm for functionalism, Swedish architecture has not lost its artistic quality. This is due to the care with which compositions are studied and proportioning of the parts adjusted. This applies to the minor details, nothing being too small for careful study. For instance, in a very pleasing functionalist building there is a tall little window up in one corner of the façade that recalls by its proportions the long low range of windows, below and to the right, which is the chief feature of the front.

There is in general a basic orderliness and refinement that has been learned, probably, from the practice of classical design and carried over into functionalism. Sometimes the monumentalism and formalism have been carried over also.

The secret of the fine appearance of Swedish functionalist buildings is, usually, that they are designed by men who are capable of making the most refined and elaborate designs of a traditional character.

The versatility that betokens a mastery of design is one of the outstanding characteristics of contemporary Swedish architects and artists. E. G. Asplund, the architect of the Stockholm Exhibition, has to his credit designs for such varied works as the beautiful wrought iron gate for a funeral chapel outside of Stockholm and a silver christening bowl of the utmost refinement of design. Carl Milles, the sculptor, designed the fine wrought iron gates at the entrance to his villa.

This breadth of interest leads to the understanding use of various materials in the enrichment of buildings. Modelled stucco is used admirably for instance, on the piers in Mr. Tengbom's Concert Hall and in the window niches of the Prince's Gallery, in Ostberg's Town Hall. Fresco, glass mosaic, cast metal, textiles and innumerable other media are employed in ways that show complete accord between the architect and the artist or craftsman. Mr. Tengbom's Swedish Match Company building is particularly rich in this respect.

AS will have been gathered from the foregoing, there is nothing hard-and-fast about the modern architecture of Sweden. It is constantly changing with the life, for Swedish architects endeavor to keep pace with the progress in all other activities. The attempt which is often made to classify certain men as romanticists, classicists, or functionalists is futile, for there is a constant interchange of views and more agreement than differences. The growth that is in evidence is an important sign of the vitality of Swedish architecture. (*Cont. on p.* 100)

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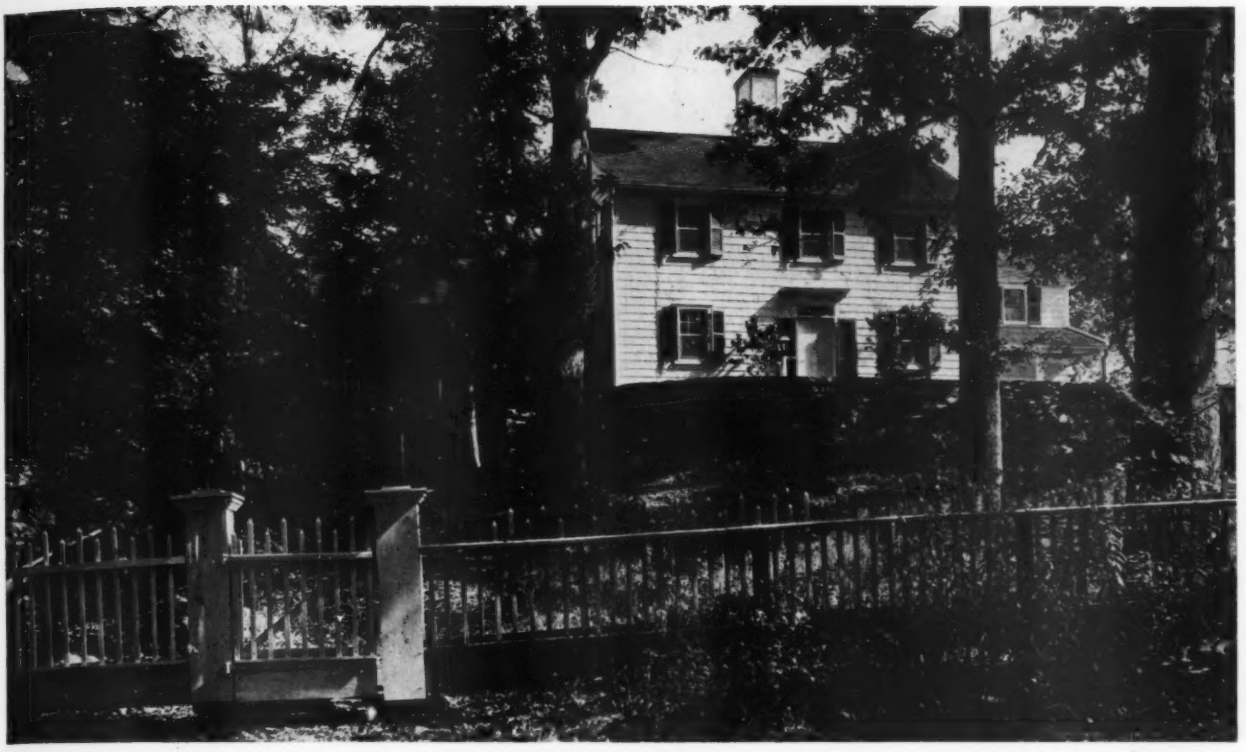

A. C. Holden, A.I.A., was the architect of this remodeled farm house described in August Good Housekeeping.

The difference is vital to the architect

A man who knows architecture said recently that the work of Good Housekeeping Studio of Architecture and Furnishings "surpasses any attempt being made to educate the public to an appreciation of good architecture."

This, of course, might be a matter of opinion. There are other magazines which have well conceived departments devoted to home building interests. But none of these which can be compared with Good Housekeeping in scope or fundamental interest has at best more than 300,000 readers.

On the other hand, Good Housekeeping reaches nearly 2,000,000 readers, largely people who by environment, ideals and incomes are logical prospects for the architect's services.

There is this vital difference about Good Housekeeping: It is doing its good for architecture in a way that does the architect the most good.

GOOD HOUSEKEEPING

Everywoman's Magazine

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As to the future, the direction in which Swedish architecture is going, it is interesting and inspiring to note that it is not concerning itself chiefly with great monumental buildings, but with forms of construction vastly more important: the homes of the people, the places in which they work and in which they take their recreation—houses, multiple dwellings, factories, offices, also the concert hall, the theatre and the cinema. The outlook from the windows must be pleasant. The streets and squares through which the people pass must be attractive, and not marred by ugly buildings or by clashing designs or by inartistic advertising signs.

When asked about this newest trend, Mr. Tengbom replied, " 'Charity begins at home,' says the old proverb. In our country we maintain that functional architecture begins in city planning. We have set as our aim the giving of sunshine and fresh air to everybody. This is impossible to attain in the older sections of cities. The problem is, however, of vital importance and must be faced. In Swedish cities we are now engaged in what we call 'a sanitary remaking' of the city plans even in regard to traffic."

MANY of the new groups of multiple dwellings consist of long and narrow buildings extending north and south with broad open spaces between them, so that sunlight and air freely enter every room. A plan has been made for improving the neighborhood of the Town Hall in Stockholm and improvements of a like nature are being made elsewhere. The town planning and housing activities include the planning of industrial districts with factories, workmen's living quarters and other facilities as part of well designed schemes.

Attention is being given to the designing of all such practical utilities as oil storage plants, silo plants, laundries, hydro-electric plants and other structures that were not formerly regarded as within the province of architecture. The intention is that nothing unsightly shall meet the eye anywhere. Closely allied to this trend in architecture is the movement that is bringing beauty into the homes of all the people through well designed "everyday wares." These things, machine made by mass production, often cost no more than the articles of inferior design which they are replacing, and the handicrafts are contributing their share of beautiful things for the homes.

The importance of this latest development was made clear by Mr. Tengbom when he said, in concluding this interview, "The leading exponents of this view of the requirements of the age are especially the younger set of architects. But the circumstances are now so changed that nearly all kinds of building operations must be considered as a functional problem in which the social, economic and practical factors have become dominant. Nobody can ignore them today."

LEON STERN, F. A. I. A., died June 30. He graduated from Cornell under a scholarship in 1889. He was a member of the Central New York Chapter of Architects, the Rochester Society of Architects, the University Club and the Cornell Club of New York. Among the Rochester buildings he designed are the Commerce Building, the University Club, the Theta Delta Chi Chapter house at the University of Rochester, several churches and a number of industrial plants.

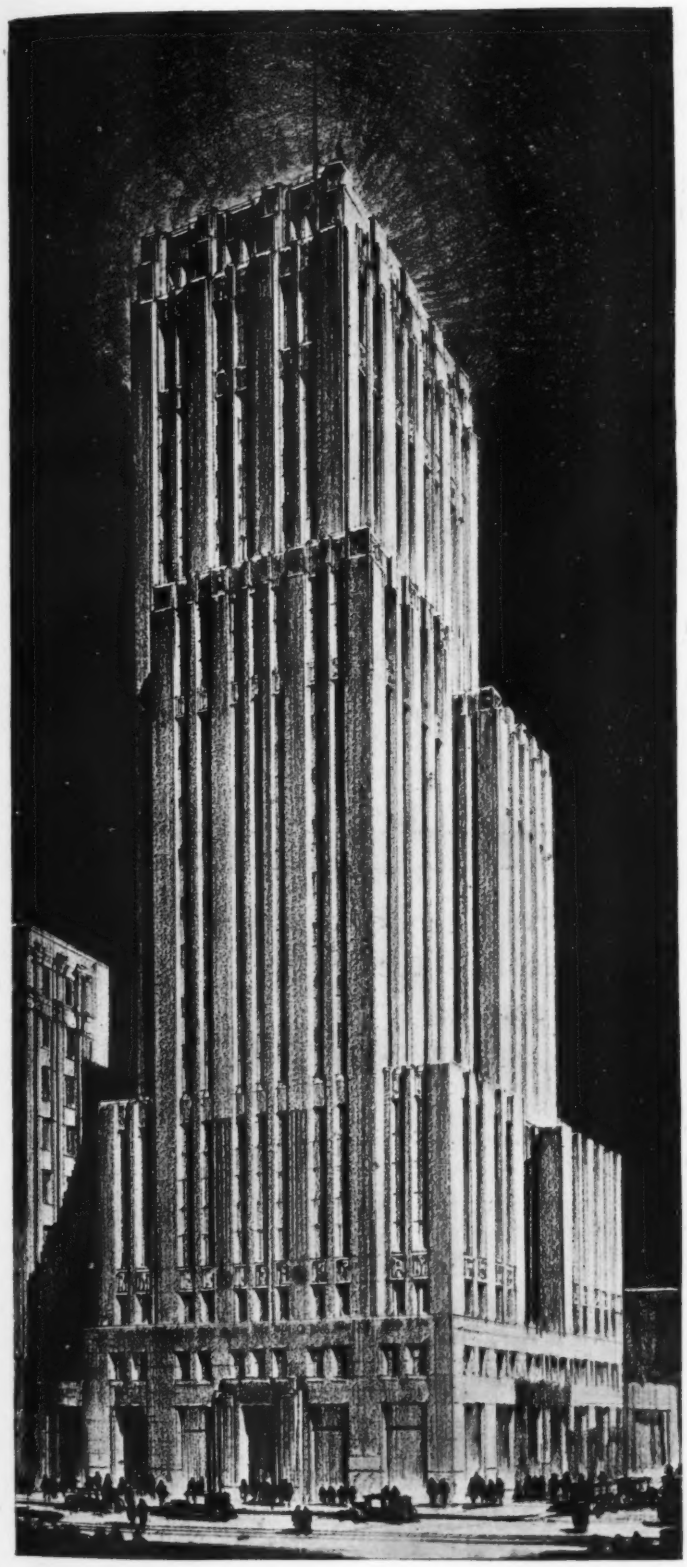
The Dallas Gas Company Building

Dallas, Texas

Architects: Lange and Witchell

Structural Engineers: Gardner and Howe

General Contractors: Jopling Construction Company



At the present time the Dallas Gas Company Building is 13 stories high. Provision has been made for an ultimate height of 23 stories, as shown above.

•

Framework of BETHLEHEM SECTIONS

•

BETHLEHEM STEEL COMPANY

General Offices: Bethlehem, Pa.

District Offices: New York, Boston, Philadelphia, Baltimore, Washington, Atlanta, Pittsburgh, Buffalo, Cleveland, Cincinnati, Detroit, Chicago, St. Louis, Houston, Dallas

Pacific Coast Distributor: Pacific Coast Steel Corporation, San Francisco, Los Angeles, Portland, Seattle, Honolulu

Export Distributor: Bethlehem Steel Export Corporation, 25 Broadway, New York City

BETHLEHEM

What Architects Are Talking About

(*Continued from page* 63)

A NEW system permitting the discount of mortgages through a new central bank, established by Federal legislation, is proposed through action taken at the recent annual convention of the National Association of Real Estate Boards. President Hoover will be asked to consider the possibility of securing such legislation. The Association's Board of Directors states:

"The weakness of the present system is shown by the following facts:

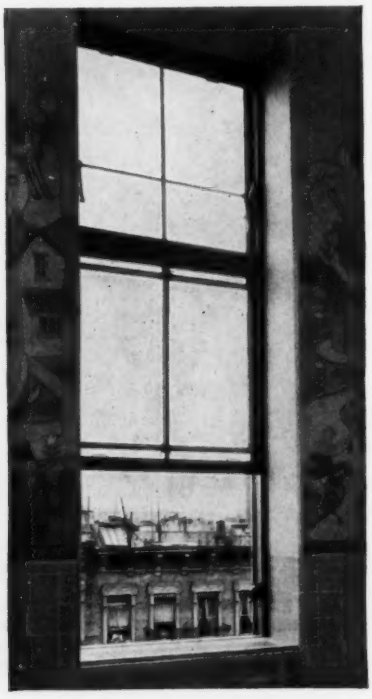
"Banks, even when in ample funds, frequently must refrain from lending on mortgages because of the danger of jeopardizing their liquid position. Building and loan associations in many localities become periodically subject to frozen condition so far as accepting new mortgages is concerned. Depositors under such circumstances often are unable to withdraw their savings, a fact which disturbs the whole financial structure.

"Short term home financing has been always a hazard, deterring buyers, investors and builders. The home owner who is unfortunate enough to have a short term loan come due in a period of depression is a victim of the present system.

"The excessive cost of junior financing has increased the cost of homes and at the same time has driven many small builders out of business."

GOVERNMENT work now in the hands of private architects is analyzed by Fred C. Croxton, acting chairman of the President's Emergency Committee for Employment, as follows: "Of the 194 jobs now in the drawing stage, private architects are handling the design of 72 projects valued at $152,687,023, while the Treasury is preparing drawings for 122 projects valued at only $26,953,600, or scarcely more than one-sixth as much. The work being done by the Treasury is mostly in specialized types of buildings in which the long experience of designers in the Supervising Architect's Office is believed to make for maximum efficiency. The design of the larger and more important public buildings is being entrusted to a large degree to private architects."

UNDERGROUND water, which has caused much trouble in the Triangle at Washington, will be dealt with in the new Post Office building by what is termed an "underground filter unit." This apparatus is a large screen sunk deep in the ground to form a well into which the underground water can flow, and yet keeps out the earth. Pumps will then be used to pump out the water, thus reducing underground water pressure.



Windows in the Guggenheim Dental Clinic, East 77th Street, New York City. York & Sawyer, Architects. Steel windows by Truscon Steel Co.

Providing Positive Control For Pressed Steel Transom Sash

The large top-hung transom sash, over the double hung pressed steel windows of the operating rooms in this hospital, are positively controlled by Lord & Burnham vertical screw thread operators.

This inconspicuous apparatus is operated with one hand, by a small crank near the sill. The transom is firmly locked at any desired angle.

Arm sets are attached to both stiles of the transom, preventing it from twisting and rattling.

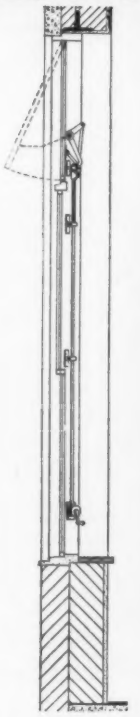
Gears and gear box are of brass and bronze, the rest of the equipment being painted to match the sash.

Lord & Burnham Co.

SASH OPERATING DIVISION

Graybar Building, New York City

Representatives in principal cities of the United States and Canada



Section through window showing apparatus in working position.

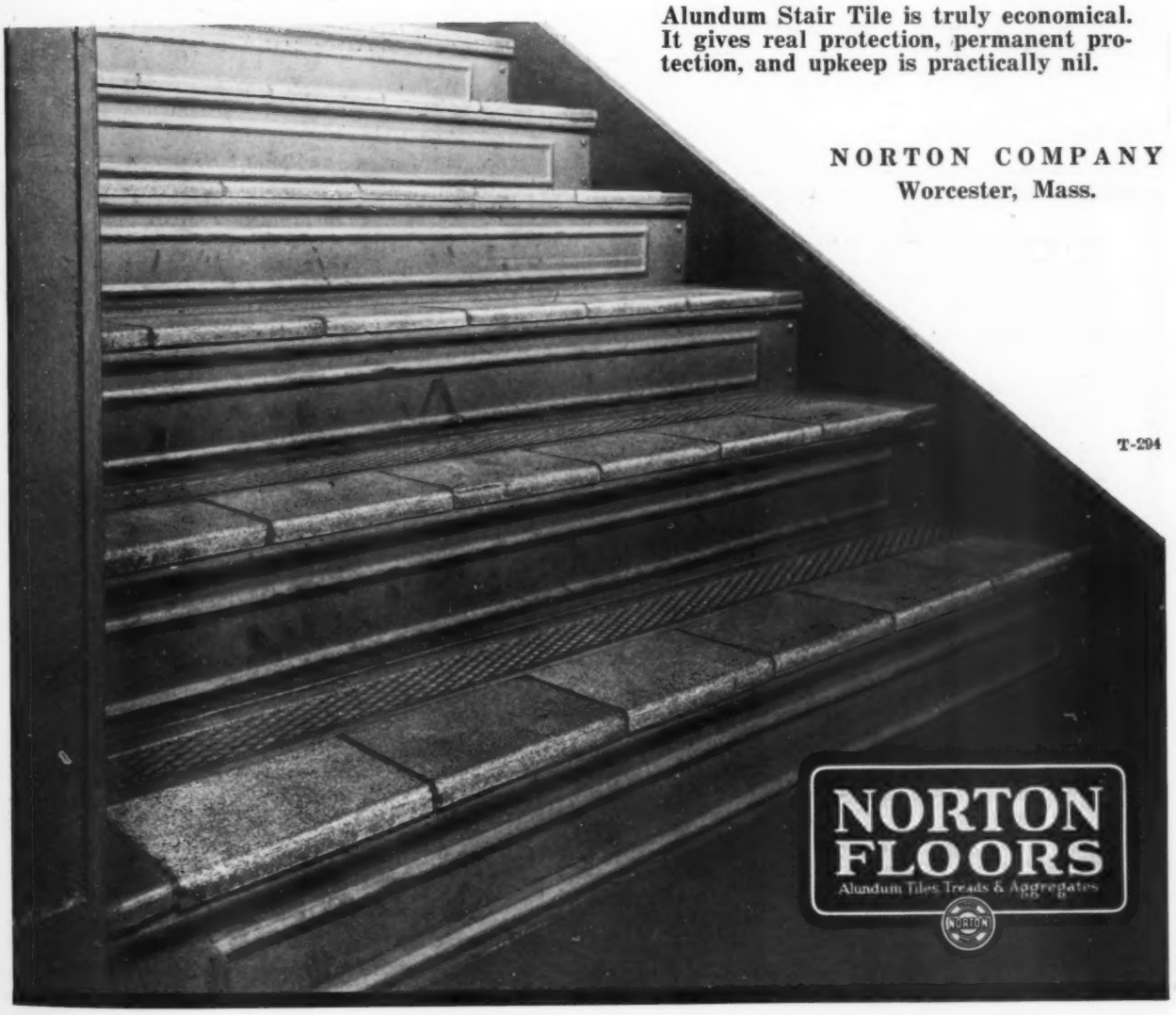
Ten Years of Hard Service—
But Not a Trace of Wear

IN August, 1921, Alundum Stair Tile was installed on all stairways of this trade school for girls. The unretouched photograph reproduced below was taken in June, 1931. You can sight along the edge of any tread on any stairway without seeing a sign of wear—even at the corners where traffic is concentrated—and the tile is as non-slip as the day it was installed.

"In all the ten years not a single girl has been known to fall on the stairs. And not a single tile has become loose"—the building superintendent's report.

Alundum Stair Tile is truly economical. It gives real protection, permanent protection, and upkeep is practically nil.

NORTON COMPANY
Worcester, Mass.



T-294

THIS new Eternit Tapered Asbestos Cement Shingle combines beauty of color, massiveness, long life, strength and fire-proof qualities at a moderate cost. Investigate.

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Factory: ST. LOUIS, MO.

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Simple, practical and sturdy in construction. Can be opened and closed quickly by Post Office representatives and left in perfect condition, with no injury to structure or finish.

Full information, details and specifications on request.

CUTLER MAIL CHUTE CO.
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PRIZES totaling $1,200 have been awarded for the most esthetic design of a steel bridge in a competition held by the American Institute of Steel Construction, and participated in by architectural and engineering students. The first prize for the best design by a student of architecture went to R. F. Weber, Atelier Adams Nelson, Chicago; second prize to Glenn E. Crippen, Iowa State College; and the third to Lester W. Casey, Iowa State College. First prize for the engineering student class was withheld; second prize went to Jeremiah C. Iandolo, University of Pennsylvania; and third prize to Covert Robertson, University of Michigan.

ANY prospective buyer may rent for a tryout period, and a substantial part of the rent will apply towards the purchase price, according to a plan worked out by the Belhall Company, developers of "Mountain Lakes," New Jersey. The rent charged is 11 per cent of the cost of the house and the lease runs for either two or three years.

THE Northern Life Tower, Seattle, was selected as the most outstanding building in the State by the Washington State Chapter at the request of the Chicago Tribune. A. H. Albertson and Associates were the architects. This building was illustrated in the February, 1930, issue of THE AMERICAN ARCHITECT.

SEVENTEEN per cent vacancies in office buildings, or 7 per cent above the normal 10 per cent vacancy allowance, is reported as of May 1 by the National Association of Building Owners and Managers, which surveyed 1,982 office buildings in 42 of the largest cities in the United States and Canada.

A "LIGHTING director" in front of the stage will be a feature of the new Earl Carroll Theatre, New York. In a space covering six seats in the first and second rows of the center aisle, the electrician, in full dress, will sit so that he may observe the color effects produced as he operates the board.

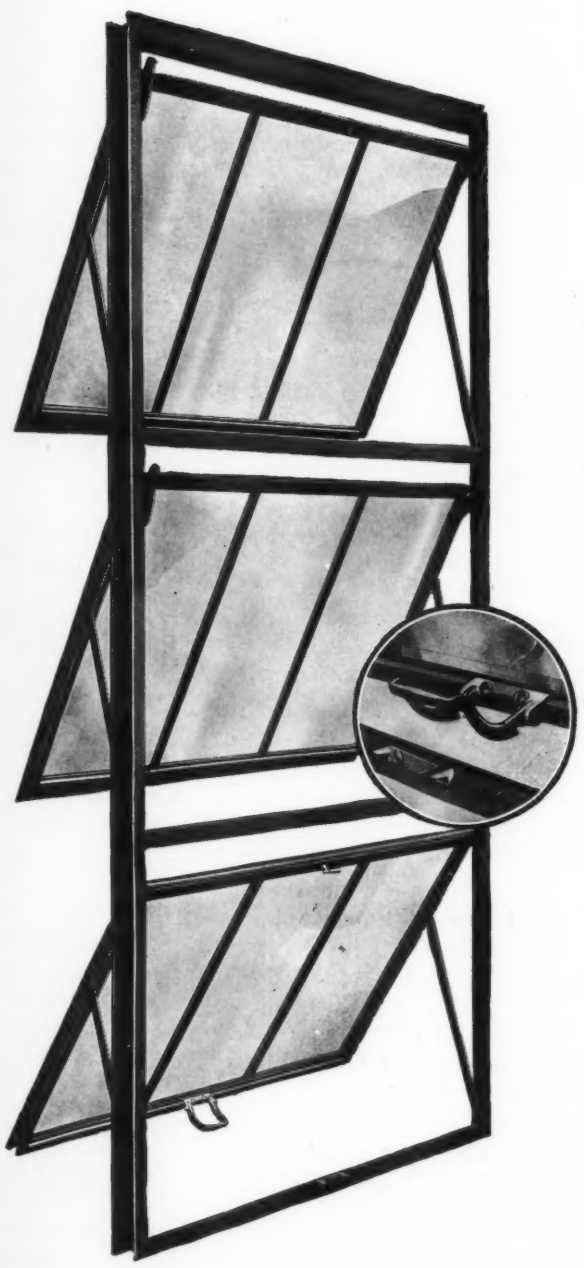
THE amount of the average mortgage given by the savings and loan associations in the State of New York from January to June, 1931, was $3,175, according to figures released by George A. Plant, executive secretary of the New York State League of Savings and Loan Associations.

PHILADELPHIA, Pa., has organized a Federation of the Construction Industry which has, as its primary purpose, stabilization of the industry in the Philadelphia area. It includes bankers, real estate men, architects, builders — in fact, everybody whose line of business is connected with the construction industry.

NEW YORK UNIVERSITY was awarded the University Medal of the Groupe Américain, Société des Architectes Diplômes par le Gouvernement Francais, for the work submitted in the competitions of the Beaux Arts Institute of Design during the past year.

DONOVAN

AWNING TYPE STEEL WINDOWS



For Better Daylighting *and* Ventilation

Sunlight without glare and fresh air without drafts are provided for schools and offices through the scientifically designed Donovan Awning Type Windows.

The individual shades on each sash act as awnings and reflect the sunlight to the ceiling where it is diffused. Movement of lower sash operates the upper sash; all sash may be opened to any angle or upper or lower sash closed. Windows may be controlled by crank operator if desired.

High quality materials, workmanship and hardware are used throughout Truscon Awning Type Steel Windows. Their moderate price makes them practical for all good buildings. Complete data, suggestions and catalog furnished on request.

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YOUNGSTOWN, OHIO
Warehouses and Offices in all Principal Cities

MONUMENTAL PROJECTED STEEL WINDOWS

A superior type of projected window for good commercial and public buildings. Complete range of types and sizes with or without hopper vents.

DOUBLE-HUNG STEEL WINDOWS

Highest quality, one-piece, welded construction. Spring bronze weather strips. Furnished in steel, bronze or aluminum, with heating recess if desired.

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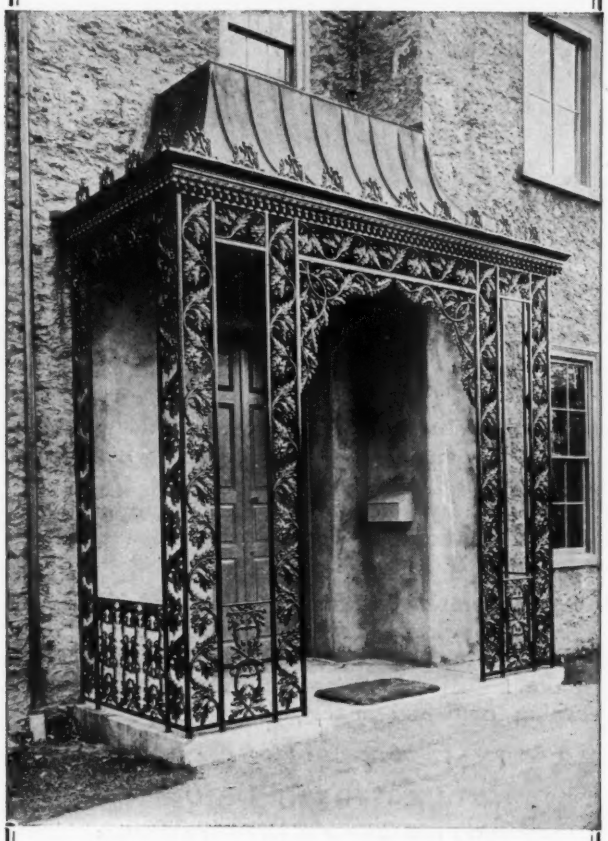
STEEL WINDOWS • STEEL DOORS • STEEL JOISTS • METAL LATHS • STEELDECK ROOFS • REINFORCING STEEL

Cast Iron Verandas
by
Smyser-Royer



Cast iron verandas bring the picturesque charm of the early 19th Century to the modern home.

The veranda shown above is cast from a pattern almost a century old, and possesses all of the charm and appeal of the original. In fact, many of the Smyser-Royer designs are almost 100 years old—others, of course, are more modern, but all bear the stamp of Smyser-Royer craftsmanship in metals.

Architects and builders who are contemplating the use of cast iron verandas are cordially invited to consult Smyser-Royer about any phase of design.

A booklet showing a variety of Smyser-Royer cast iron veranda designs will be mailed at your request.

Smyser-Royer Company

MAIN OFFICE AND WORKS, YORK, PA.

Philadelphia Office, 1700 Walnut Street

H. VAN BUREN MAGONIGLE, A. I. A., has been given the first honorary degree of doctor of architecture ever conferred in this country. The degree was presented at the 1931 commencement of the University of Nebraska.

OFFICERS of the Brooklyn Chapter, A. I. A., were elected May 25 as follows: Charles G. Wagner, president; William A. Sanders, vice-president; George Francis Kiess, secretary; Herbert G. Bowman, treasurer; Ralph M. Rice, surveyor.

LIVING costs of the average wage-earner are lower than at any time recorded within the past twelve years, and the trend is still downwards, according to the National Industrial Conference Board.

PERSONALS

A. F. Wysong and T. P. Jones, formerly of the firm of Wysong, Bengtson & Jones, Charleston, West Va., announce their association with Russell Seymour, Jacksonville, Fla., for the practice of architecture under the firm name of Wysong, Seymour & Jones. Offices will be in the Schmidt Building, Cincinnati, Ohio, and Peoples Bank Building, Charleston, West Va.

Raymond M. Hood, Frederick A. Godley and J. Andre Fouilhoux, announce the dissolution by mutual consent of the firm of Raymond Hood, Godley & Fouilhoux, as of March 31, 1931. Raymond M. Hood and J. Andre Fouilhoux will continue the practice of architecture under the firm name of Hood & Fouilhoux, 40 West 40th Street, New York.

Announcement is made of the re-opening of the architectural offices of T. F. Doan, 217 Sunset Building, Bellingham, Wash. William Aitken is the successor to Mr. Doan; Alfred F. Moberg is resident manager.

Louis P. Roncoli has opened an office for the practice of architecture at 30 Le Moyne Parkway, Oak Park, Ill. He wishes to receive manufacturers' catalogs.

William G. Kafes, architect, has opened new offices at Trenton, N. J., and would like to receive manufacturers' catalogs and samples.

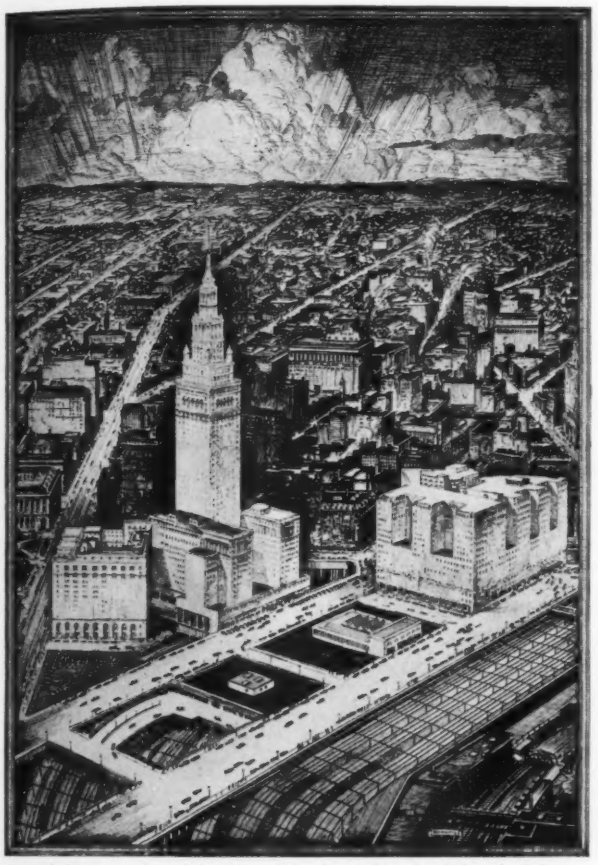
Theodore R. Jacobs, architect, has moved his offices to the Central Building, 108 West Sixth Street, Los Angeles.

O'Meara and Hills, architects, announce new offices at 5709 Waterman Boulevard, St. Louis, Mo.

Maurice J. Sullivan, A. I. A., Houston, Texas, has moved to 4301 Main Street, Houston, Texas.

Nichols & Fritzsche, Inc., architects, have moved to new offices at 1836 Euclid Avenue, Cleveland, Ohio.

A GREAT PROJECT —WELL EQUIPPED



An artist's conception of the Sargent-equipped Cleveland Terminal Group; Graham, Anderson, Probst & White, Architects

SARGENT HARDWARE contributes to the beauty and usefulness of each one of the buildings that make up the great Cleveland Terminal Group—office building, hotel, and railroad terminal. This fine-quality hardware is a usual specification when excellence of equipment must finish off excellence of construction.

Sargent Hardware covers the entire field of building—hotel, apartment, hospital, public and educational buildings and residences of every size. Designs range from classic, authentic reproductions of the various period patterns to the extreme simplicity of the ultra-modern.

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Our line is adequately represented in Sweets', 1931 edition, Volume C, pages C3780 *to* C3878.

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"Quilt"

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BULLETINS

TESTS OF WELDS. By Wilbur M. Wilson, research professor of structural engineering, University of Illinois. A report of an investigation conducted by the Engineering Experiment Station, University of Illinois, in cooperation with the Chicago Bridge and Iron Works.

DISTRIBUTION AND MECHANICAL PROPERTIES OF ALASKA WOODS. By L. J. Markwardt, senior engineer, Forest Products Laboratory. Technical Bulletin No. 266 issued by the United States Department of Agriculture, Washington, D. C. Price twenty cents.

WIND PRESSURE ON A MODEL OF A MILL BUILDING. By Hugh L. Dryden and George C. Hill. Research Paper No. 301 of the U. S. Bureau of Standards. For sale by the Superintendent of Documents, Washington, D. C. Price, 10 cents.

ELECTRAGIST STANDING FOR WIRING INSTALLATIONS. Published by the Association of Electragists, 420 Lexington Avenue, New York. A. I. A. file 31 c 61.

EFFECT OF BUILDING MATERIALS ON PAINT FILMS. By H. M. Llewellyn. Building Research Bulletin No. 11 published by the Department of Scientific and Industrial Research, 16 Old Queen Street, Westminster, S. W. 1, London, England. Price, 2d net.

Government Competition With Private Business

AMONG the general objectives in the Platform for American Business, and fundamental in the planning of sound business development, is one of greatest importance to the power field—"Encouragement of Private Initiative and Responsibility vs. Extension of Governmental Activity," states *Power*.

The extent to which private initiative is being encroached upon is little suspected by many and deserves review.

It has long been a source of dissatisfaction among our shipbuilders that they should be placed in competition with the Federal Government in the building of naval vessels, and if all the cost of navy yard built ships were charged against them it is a practical certainty that their prices would suffer greatly in comparison with privately built vessels. . . . But a short time ago the United States Navy requested a substantial appropriation of Congress for the manufacture of diesel engines and included a request for $500,000 for the purchase of European diesel engines for experimental purposes. . . . One may very properly ask why the navy should not spend its $500,000 helping diesel manufacturers at home. This would be a really constructive thing to do and would have the immediate virtue of aiding private initiative and the employment of men as well.

The most recent effort of government to extend its activity was concluded with the President's veto of the Muscle Shoals bill. Had it become law, the government would have gone into the business of making fertilizer, and of operating a public utility in competition with its

BLOXONEND FLOORING

LAYS SMOOTH—STAYS SMOOTH

Shown below is a BLOXONEND floor in the plant of the American Lithographic Co., Buffalo. This is an instance where Bloxonend replaced a comparatively new floor of another type which was durable enough but not sufficiently smooth.

After all, LASTING SMOOTHNESS is really the big thing to look for in a factory floor. SMOOTHNESS is what speeds up trucking, cuts upkeep cost on equipment and saves vibration damage to goods in process of manufacture. A durable factory floor that does *not* stay smooth is a liability—its long life is valueless.

Bloxonend is resilient, bright in color, odorless, noiseless, splinterless and permanent. Its unique construction insures lasting smoothness. Widely used by leading industries and in the gymnasiums and shops of prominent schools. Ask for sample and specifications from Carter Bloxonend Flooring Co., Kansas City, Mo. See Sweet's for branch office addresses.

BLOXONEND *Lays Smooth* **FLOORING** *Stays Smooth*

Bloxonend is furnished in 8 foot flooring lengths. The tough end-grain forms the wearing surface.

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with
U. S.
MINERAL WOOL

The Perfect Insulator

COLD PROOF, HEAT PROOF, FIRE PROOF
SOUND PROOF, VERMIN PROOF

Greater Comfort And Actual Saving!

The proper insulation of a home is not an additional building expense but is a positive money saver.

Year after year, as long as the building lasts, the original installation of Mineral Wool never fails to provide greater living comfort and reduced expense.

It saves annually about one-third in fuel costs, assures a warmer house in winter, a cooler one in summer, thoroughly sound-deadened and free of vermin.

Although the nominal cost of installation will be made up in a short period of time, the added comfort is alone worth many times the original outlay.

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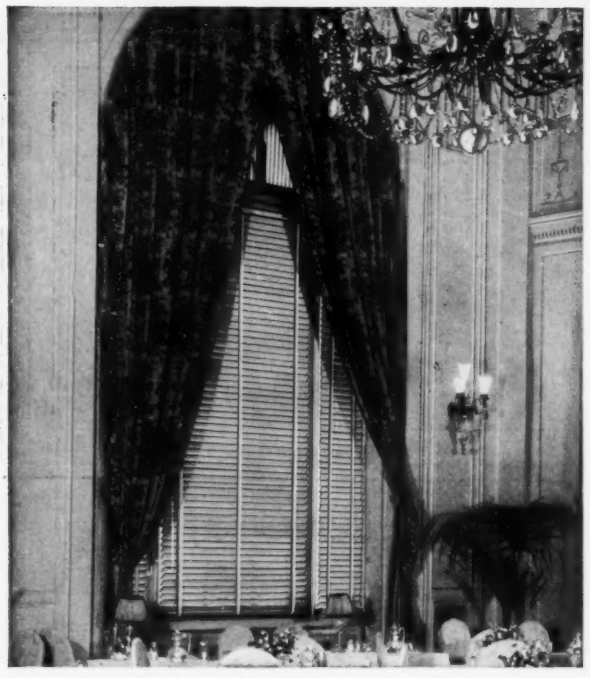

The beautiful and restful dining room of the Hotel Cleveland, famed hostelry at Cleveland, Ohio

THIS attractive installation in the Hotel Cleveland is typical of the use of Victoria Venetian Blinds in the finer hotels and clubs, nation-wide.

No other type of window equipment gives the delightful lighting effects, softening and deflecting the sunlight . . . at the same time allowing draftless ventilation.

Victoria Venetians are furnished in all colors and tones. They fit into any decorative scheme.

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VICTORIA VENETIANS

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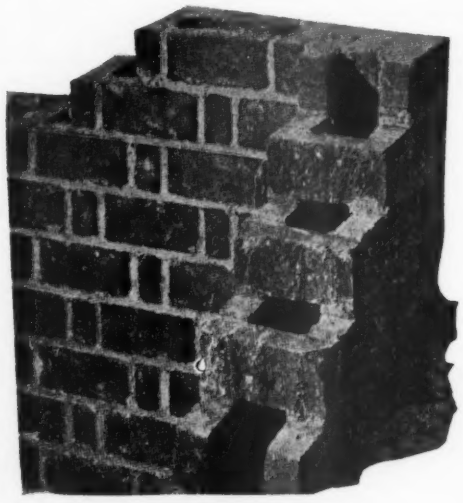
own citizens, upon the prosperity of whom the government itself depends.

Business men and individuals are deeply affected by these tendencies of government to enter into competition with the hand that feeds it. Government can not do business with the efficiency of private enterprise. Because one's personal life may not directly contact with these affairs, his prosperity is none the less definitely tied into the support and advancement of a sound Platform for American Business, of which the encouragement of private initiative and responsibility vs. the extension of governmental activity, is a plank of special significance.

Books

(Continued from page 72)



Eight-inch all rolox Flemish bond. From "Brick Engineering"

BRICK ENGINEERING, VOL. 2

By Major L. B. Lent. Published by the Common Brick Manufacturers' Association of America, Cleveland, Ohio. Illustrated; indexed; 126 pages; size 5 x 7½; price $1 in fabricoid, 50c in paper.

THE subtitle of this book is, "Design and Construction Brick Buildings." It discusses the design and construction of those basic structural parts and design considerations which are common to most any type or style of building.

It covers brick masonry materials, physical properties of brickwork, designing brick masonry, reinforced brickwork, essentials of good workmanship, construction details of solid or hollow brick walls, and similar practical data. There is a glossary of terms used in brickwork.

The book is written in language easy to understand. Major Lent, the author, has for a number of years been chief engineer of the Common Brick Manufacturers' Association and is well known to readers of THE AMERICAN ARCHITECT as a contributor of articles on brickwork.

LABORATORY TESTS OF REINFORCED CONCRETE ARCHES WITH DESKS. By Wilbur M. Wilson. Bulletin 226 of the Engineering Experiment Station, University of Illinois, Urbana. Price 50 cents.

St. Paul's Memorial Reformed Church, Reading, Pennsylvania
Miles B. Dechant, Reading, Pa., Architect

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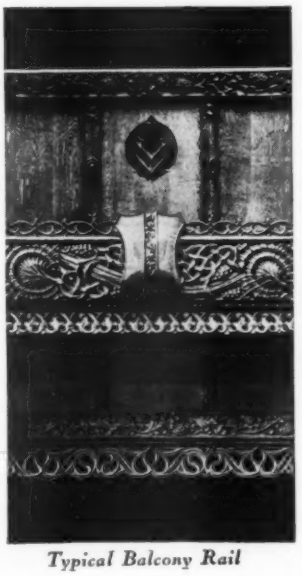
by Kundtz Craftsmen . . . .



Typical Balcony Rail

The intricate detail and beautiful finish typical of the wood carvings produced by Kundtz Craftsmen add dignity wherever installed. ☆ St. Paul's Memorial Reformed Church of Reading, Pennsylvania is a typical Kundtz installation. Architects all over the country are specifying Kundtz craftsmanship. Let our representative tell you why.

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Trouble Breeds in *Masonry Joints*

WHERE there is a crevice, however small, between courses of masonry, there you will find dust, moisture, chemical action, and, in cold weather, frost.

Where there are dissimilar materials joined in building construction, there you may expect to find crevices. Coefficients of expansion have a way of exerting rude force.

There is a way to beat Nature at her own game. Seal up each joint by calking it with a permanently plastic material, a substance that "takes up" any variation in the space. Does the joint contract? So does Pecora Calking Compound. Does the joint widen by a hair's breadth? Pecora holds grimly to both materials. It "stretches." It shuts out the causes of disintegration and decay.

In addition to its fundamental qualities, it must be non-staining and must be available in colors matching materials for unusual work. Needless to say, our sixty-nine years of manufacturing building materials have assured a substance that has proven dependable. It is protecting much of the finest masonry erected in the last two decades. We will forward additional information about Pecora Calking Compound if you will fill out and mail the coupon below.

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The American Architect receives many requests for information, covering everything from men who seek positions and architects who require men or want back copies of a magazine. To make this service as useful as possible, such requests will be published without charge. Address your reply to The American Architect Want No. ..... ( ) and enclose in a separate envelope. It will be readdressed and forwarded.

Types of subjects eligible for listing are: Architects seeking designers, draftsmen, engineers, specification writers or other assistants—men seeking positions—partner wanted—practice for sale—architects draftsmen and students who have books for sale or exchange, or who want back issues of a magazine—firms seeking a man with architectural training—architects who wish commercial connections, etc.

✧

PERMANENT, temporary connections desired with Architect, Firm or Owner intending building; by first-class carpenter-cabinetmaker, ex-foreman. Expert on installing finest interiors; panelling designs, concealed locks, etc. Go anywhere, even abroad. *American Architect Want No.* 156.

ARCHITECT now in private practice, would like to give all or part of his time to some manufacturer, as representative, promotional work, publicity work, contact man, draftsman, erection superviser, or in any other capacity. Salary secondary. Age 38. Married. Can go anywhere. *American Architect Want No.* 157.

ARCHITECT'S SUPERINTENDENT. University graduate in Architecture. Superintendent of proven ability. Twenty-four years of experience, the last eighteen years on large high-grade work—very fine residences, high schools, hotels, office buildings and court houses. Well recommended by architects and owners. Moderate salary. Available on short notice. *American Architect Want No.* 158.

ARCHITECTURAL DRAFTSMAN, university graduate, with several years' experience, including two with one middle-western A. I. A. architect, seeks position in New York. Fully capable of developing residential commercial and industrial work from sketches to completion. Salary secondary to opportunity. Age 26. *American Architect Want No.* 159.

POSITION WANTED as architectural draftsman or general assistant to architect or engineer. Over 30 years' experience on all types of buildings and classes of construction in New York, Cincinnati, Cleveland, etc. Considerable school work. Thoroughly practical, accurate and rapid. Sketches to specifications. Some ability of design and rendering. Practiced 8 years. A. I. A. 1912. Will go anywhere. Moderate salary. *American Architect Want No.* 160.

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REGISTERED ARCHITECT, college graduate, 12 years practical experience, fireproof and non-fireproof buildings. Can handle complete jobs. Would like position as architectural draftsman. Best of references. Salary reasonable. *American Architect Want No.* 162.

OFFICE HELPER or other job. Young man (21) determined on becoming an Architect. Carpenter, with a knowledge of "Blueprints and Drawings" in a practical manner. "History of Architecture" and a beginning in Drafting. Consistent and alive. Want to get a progressive Architect (U. S. or Can.). Will go to any inconvenience in order to progress in this direction. *American Architect Want No.* 163.

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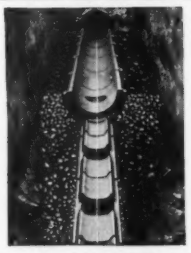
After smoothing trench bottom with sand-cement cushion, Base Drain Foundation is set to a line and banked with broken stone. Bottom conduit halves are installed and bells cemented. Base Drain provides ample *immediate* drainage and a solid foundation for Conduit.



Ric-wiL guarantees an efficiency of 90% or better—and every job must completely satisfy the owner.

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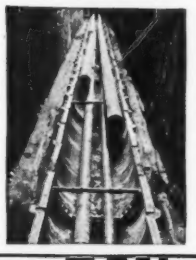

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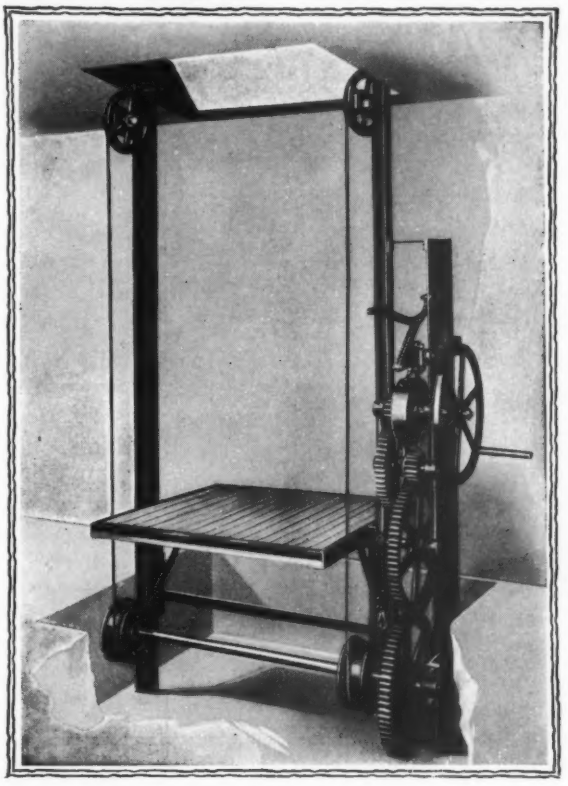

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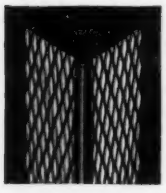

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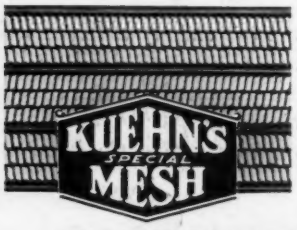

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